NiSM

National Institute of Securities Markets
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# Workbook for

# NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination

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# NISM-Series-V-C:
# Mutual Fund Distributors (Level 2)
# Certification Examination

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This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination.

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NISM supports candidates by providing lucid and focused workbooks that assist them in understanding the subject and preparing for NISM Examinations. The book covers advanced concepts of mutual funds such as Fund of Funds, Exchange Traded Funds, Real Estate Mutual Funds, Venture Capital Funds, Private Equity Funds and International Funds, new channels of distribution for mutual funds, fund valuation, fund performance measures, etc. It will be immensely useful to all those who want to have a better understanding of Indian mutual fund industry.

**Sandip Ghose**
**Director**

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**About NISM**

National Institute of Securities Markets (NISM) was established by the Securities and Exchange Board of India (SEBI), in pursuance of the announcement made by the Finance Minister in his Budget Speech in February 2005.

SEBI, by establishing NISM, articulated the desire expressed by the Government of India to promote securities market education and research.

Towards accomplishing the desire of Government of India and vision of SEBI, NISM delivers financial and securities education at various levels and across various segments in India and abroad. To implement its objectives, NISM has established six distinct schools to cater to the educational needs of various constituencies such as investors, issuers, intermediaries, regulatory staff, policy makers, academia and future professionals of securities markets.

NISM is mandated to implement Certification Examinations for professionals employed in various segments of the Indian securities markets.

NISM also conducts numerous training programs and brings out various publications on securities markets with a view to enhance knowledge levels of participants in the securities industry.

**About NISM Certifications**

The School for Certification of Intermediaries (SCI) at NISM is engaged in developing and administering Certification Examinations and CPE Programs for professionals employed in various segments of the Indian securities markets. These Certifications and CPE Programs are being developed and administered by NISM as mandated under Securities and Exchange Board of India (Certification of Associated Persons in the Securities Markets) Regulations, 2007.

The skills, expertise and ethics of professionals in the securities markets are crucial in providing effective intermediation to investors and in increasing the investor confidence in market systems and processes. The School for Certification of Intermediaries (SCI) seeks to ensure that market intermediaries meet defined minimum common benchmark of required functional knowledge through Certification Examinations and Continuing Professional Education Programmes on Mutual Funds, Equities, Derivatives Securities Operations, Compliance, Research Analysis, Investment Advice and many more.

Certification creates quality market professionals and catalyzes greater investor participation in the markets. Certification also provides structured career paths to students and job aspirants in the securities markets.

**About the Workbook**

This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Mutual Fund Distributors (Level 2) Certification Examination. NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination seeks to create common minimum knowledge benchmark for associated persons, i.e., distributors, agents or any persons employed or engaged or to be employed or engaged in the sale and/or distribution of mutual fund products and advisory functions, in order to enable a better understanding of features of advanced mutual fund products, fund valuation, fund performance measurements, investor service and related regulations.

The book covers advanced concepts of mutual funds such as Fund of Funds, Exchange Traded Funds, Real Estate Mutual Funds, Venture Capital Funds, Private Equity Funds and International Funds, new channels of distribution for mutual funds, fund valuation, fund performance measures, etc.

## About the NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination

*NISM-Series-V-A: Mutual Fund Distributors* certification examination (MFD, launched on June 1, 2010) is the requisite standard for people who sell mutual funds should possess and is the mandated examination for all distributors vide SEBI notification No. LAD-NRO/GN/2010-11/09/6422, dated May 31, 2010.

*NISM-Series-V-B: Mutual Fund Foundation Certification* Examination (MFF, launched in January 2013) is the minimum knowledge benchmark for the new cadre of distributors as defined in SEBI circular CIR/IMD/DF/21/2012 dated September 13, 2012.

***NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination*** (MFD-L2) is a voluntary examination and seeks to fulfil the aspiration of mutual fund advisers and employees, who wish to assess themselves against higher standards of overall expertise related to mutual funds sales, distribution and advisory functions. Through such certified professionals, NISM hopes to benefit the mutual fund industry.

**The examination is voluntary** and is open to all. In case of examinees who have qualified in the NISM-Series-V-A: Mutual Fund Distributors Certification Examination (MFD) and are now appearing for the NISM-Series-V-C: Mutual Fund Distributors (Level 2) Certification Examination (MFD-L2), performance in MFD examination already obtained, will not be impacted.

Case studies used in this workbook may cover applicative aspects of content covered in MFD workbook. Candidates are therefore advised to be fully conversant with the curriculum of the MFD examination, before they attempt this Level 2 examination.

### Examination Objectives

The examination seeks to create a common knowledge benchmark for associated persons, i.e., distributors, agents or any persons employed or engaged or to be employed or engaged in the sale and/or distribution of mutual fund products and advisory functions in order to enable a better understanding of features of advanced mutual fund products, fund valuation, fund performance measurements, investor service and related regulations.

On successful completion of the examination the candidate should:

- Understand the salient features of Fund of Funds, Exchange Traded Funds, Real Estate Mutual Funds, Venture Capital Funds, Private Equity Funds and International Funds
- Know the legalities of real estate mutual funds, investment restrictions applicable to mutual fund schemes, and the processes for making changes in the structure of a mutual fund or any of its schemes
- Appreciate the working of alternate channels of distribution viz. stock exchange and internet

- Get acquainted with the approaches fund managers take to manage investments and associated risks
- Understand how equities, debt, derivatives and real estate are valued in mutual fund schemes
- Get oriented to the accounting aspects of NAV determination, investor's transactions with the fund and corporate actions by investee companies
- Know how taxation affects mutual fund schemes and investors
- Understand the processes underlying investment in NFO, open-end schemes, closed-end schemes and ETF as well as nomination and pledge processes relating to mutual funds
- Appreciate how schemes are evaluated
- Get a historical perspective on returns earned in different asset classes
- Get acquainted with the issues involved in selling alternate investment products
- Get oriented to basics of financial planning
- Understand ethical requirements and measures to protect mutual fund investors

## Assessment Structure

The examination consists of 8 caselets with 4 multiple choice questions of 2 marks each per caselet and 36 one mark multiple choice questions adding up to 100 marks. The examination should be completed in 2 hours. There is negative marking of 25% of the marks assigned to a question. The passing score for the examination is 60 marks.

## How to register and take the examination

To find out more and register for the examination please visit www.nism.ac.in

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# 1. Mutual Fund Structures

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about the salient features of:

- Fund of Funds
- Exchange Traded Funds
- Real Estate Mutual Funds
- Venture Capital Funds
- Private Equity Funds
- International Funds

Chapter 1 of the MFD Workbook introduced various types of mutual fund schemes. Most of these are available for investment in India, and are being sold by mutual fund distributors. Here, we focus on schemes that operate differently from the regular mutual fund structures.

## 1.1. Fund of Funds

In the normal structure, investors invest in a mutual fund scheme, which in turn invests in equity, debt or gold, or a mix of these asset classes. Normal mutual fund schemes are neither expected nor encouraged to invest in other mutual fund schemes. Therefore, the SEBI (Mutual Funds) Regulations, 1996 [referred to as "MF Regulations" in the rest of this Workbook] impose a 5% limit on inter-scheme investments. This is elaborated in Chapter 2.

*Fund of Funds (FoF)* invests in other mutual fund schemes, floated by the same mutual fund or other mutual funds. Since their investment objective itself is to invest in other mutual fund schemes, the 5% limit mentioned above is not applicable to FoF.

As discussed in the MFD Workbook, mutual funds float different kinds of schemes to cater to different investor needs. Over a period of time, there has been a proliferation of mutual fund schemes. This is not only confusing for the investors, but also cumbersome to administer, for the mutual funds.

SEBI has been suggesting that Asset Management Companies (AMCs) should merge schemes that have similar investment objectives, so that the multiplicity of schemes is reduced. This has led to some consolidation of schemes.

As on December 31, 2016, the Indian mutual fund industry offered over 2,500 mutual fund schemes. It is difficult for investors to evaluate such a wide range of schemes. FoF is marketed on the premise that it will maintain an optimal portfolio of mutual fund schemes that would help investors benefit from the market.

FoF that invests in mutual funds abroad offers investors the additional benefit of taking international exposure by investing in Indian rupees, as will be seen in the section on "International Funds" in this Chapter.

Under the MF Regulations, FoF is subject to the following investment restrictions:
(a) It shall not invest in any other FoF scheme;
(b) It shall not invest its assets other than in schemes of mutual funds, except to the extent of funds required for meeting the liquidity requirements for repurchases or redemptions, as disclosed in the offer document of the FoF scheme.

Further, no mutual fund scheme is permitted to invest in a FoF.

FoF may offer benefits to the investor. However, the point to note is that the FoF also adds to the cost borne by the investor. There is a cost charged in the underlying mutual fund schemes (where the FoF invests); and there is an additional cost in the FoF scheme (where the investor invests). As with any mutual fund scheme, the investor should read the Investment Policy in the Offer Document of the FoF before investing.

An investor in a FoF should consider the composite cost that his investment would incur. The Mutual Fund Regulations have limited the total expenses of FoF schemes, including the weighted average of charges levied by the underlying schemes, at 2.50 per cent of the average daily net assets of the scheme.

AMCs are not permitted to enter into any revenue sharing arrangement with the underlying funds. Any commission or brokerage received from the underlying funds has to be credited to the FoF.

## 1.2. Exchange Traded Funds

All investors who invest in an open-end mutual fund scheme on a single day get their units at the same Net Asset Value (NAV); similarly all repurchases from a mutual fund scheme on a day happen at the same NAV. This is of course subject to the cut-off timings discussed in Chapter 7 of MFD Workbook.

A closed-end mutual fund scheme is listed in the stock exchange. Therefore, its price might fluctuate during the day, in line with the overall market conditions. However, concern is the lack of liquidity for the investor, if the scheme does not sufficiently trade in the stock exchange.

Liquidity is generally not a concern for investors in an open-end scheme, because the scheme is open for sale and re-purchase on any trading day. However, the open-end scheme ends up having to plan for this liquidity by maintaining some funds in liquid assets. To the extent of those liquid assets, the scheme's assets are not invested in the asset class where it would normally have been invested.

Further, between the time funds are received from the investor, to the time these are deployed in the market, the market itself may move. If the market moves higher, it will hurt all the investors in the scheme.

Similarly, there can be a time lag between the re-purchase by the investors, and sale of securities by the scheme to provide the funds for the re-purchase. If the market moves lower during this time lag, it will hurt the investors who continue in the scheme (the exiting investors' units being redeemed at the earlier higher NAV).

The problems related to time-lag can be quite severe if there are significant sale or re-purchase transactions in a day.

Thus, the following are inherent weaknesses in the traditional mutual fund structure:

- **Open end schemes**
    - Lack of a dynamic price during the day
    - Need to provide for liquid assets
    - Timing lags in investment and redemption
- **Closed-end schemes**
    - Lack of liquidity (despite listing in the exchange).

*Exchange Traded Funds (ETF)* seek to get over all these problems, through a unique structure as follows:

- An ETF accepts cash only during the *New Fund Offer (NFO)*.
- Post-NFO, it only accepts securities (against sale of new units) or gives securities (against re-purchase of existing units). Therefore, it does not need to maintain liquid assets, and is unaffected by the timing lags.
  Such transacting through securities is feasible only for large value transactions. Therefore, this post-NFO route of direct transactions with the fund is essentially for large investors.
- Post-NFO liquidity for retail investors is structured through *market makers* appointed by the fund. The market makers are responsible to give *two-way quotes* [*bid price* (price at which market maker is prepared to buy units from the investor) and *ask price* (price at which market maker is prepared to sell units to the investor)].
  The *bid-ask prices* can keep fluctuating during the day, depending on market conditions. The *bid-ask spread* (the difference between the two prices) is a profit for the market maker.
  For example, if the market maker quotes "15.10,15.20", he would earn 10 paise per unit, by buying a unit at Rs15.10 (from an investor) and selling the unit (to some other investor) at Rs15.20.

- Professional market makers fine-tune their quotes in such a manner that they are able to balance the buying interest and selling interest in the market. However, this is not always possible, especially if the market is illiquid.

    - At the end of the day, if the market maker finds that he has bought 12,000 units and sold 12,500 units, he needs to deliver 500 additional units to investors who have paid for those units. Market makers retain a small portfolio of the units to be able to handle such mismatches.
      In the event of a large mismatch i.e. more retail investors have bought units (for which they would have paid money), the market maker will convert the money into securities and transfer them to the ETF (for it to issue units against the securities).
    - Similarly, if the market maker finds that more retail investors have sold units (for which they would need to be paid money), the market maker will offer the units for re-purchase to the ETF. The ETF will release securities (by redeeming those units), which the market maker will sell, in order to pay the investors.

The above explains ETF based on securities. Similarly, ETFs can be based on assets like gold.

In order to facilitate transacting through securities and enhance transparency, ETFs are based on a standardised portfolio structure, like an Index; or a standardised asset, like gold. This is announced when the scheme is launched. Therefore, an investor knows that the performance of the ETF is expected to track the performance of its underlying index or asset.

The Offer Document of the ETF would provide details of how the ETF is constructed. The maximum permissible cost for an ETF is 1.5% of its average daily net assets. In addition, the following costs and expenses are permitted (for all mutual fund schemes, not just for ETF):

- Brokerage and transaction costs for executing trades (purchase and sale of securities by the scheme) can be included in the cost of investment upto 0.12% for cash market transactions and 0.05% for derivative transactions.
- Upto 0.30% of the average daily net assets can be charged if the net inflows from beyond the top 15 cities is at least:
    - 30% of the gross new inflows in the scheme; or
    - 15% of the average AUM (year to date) of the scheme;

  whichever is higher.

  In case the collections from beyond the top 15 cities is lower than this limit, then the 0.30% additional limit is proportionately reduced.

  This limit is to be used for meeting distribution expenses related to those cities that are beyond the top 15 cities.

Further, if the money collected from these cities is redeemed within 1 year of investment, then the part of the additional limit that relates to those moneys needs to be clawed back (reversed).

## 1.3. Real Estate Mutual Funds(REMF) & Real Estate Investment Trusts(REIT)

In April 2008, SEBI took a landmark step of adding real estate to the list of permitted investments for mutual funds. Under the revised definition, "mutual fund" means a fund established in the form of a trust to raise monies through the sale of units to the public or a section of the public under one or more schemes for investing in securities including money market instruments or gold or gold related instruments or real estate assets. "Real estate mutual fund scheme" means a mutual fund scheme that invests directly or indirectly in real estate assets or other permissible assets.

Chapter VI A was added to the SEBI Regulations, to set the regulatory framework for real estate mutual funds. These are discussed in detail in Chapter 2 of this workbook.

An alternate format for pooling investor money into real estate is provided in Securities & Exchange Board of India (Real Estate Investment Trusts) Regulations, 2014 (REIT Regulations). As discussed in Chapter 2, the structure of REIT is quite different from REMF. REITs are focused on investing in rental-earning properties and need to distribute 90% of their income.

Irrespective of structure, an investor needs to be aware of the following features of real estate exposure:

- Real estate, as an asset class, behaves differently from debt, equity and gold. Therefore, it helps investors in diversifying their portfolio and reducing the risk.

- Real estate is a less volatile asset than equity. It has its cycles, but it tends to follow a broad trend, either upwards or downwards.

- Further, real estate is a growth asset that can yield high and growing regular income in the form of rentals.

- However, direct investment in real estate has the following limitations:
  - High transaction value, which limits such investments to high net worth investors
  - High transaction costs for dealing in real estate
  - Low liquidity, as compared to equity and gold
  - Lack of transparency in pricing and problem of unaccounted money
  - Regulatory risk of ownership issues with property and other frauds related to transacting
  - Hassles of administering the real estate property, protecting from encroachments etc.

- The limitations in direct investment in real estate, make REMF and REIT an optimal approach to taking exposure to this asset class:
  - Ticket size for investment in REMF can go down to Rs1,000, or even lower. Minimum investment, on subscription to REIT is set at Rs 200,000; these can be traded at a minimum value of Rs 100,000 in the stock exchange.
  - Professional investors like the managers of these pooled vehicles are in a better position to handle the other problems and risks.

- Yet, investors need to be aware of the following risks in these pooled vehicles:
  - SEBI Regulations bar mutual funds from indulging in cash transactions in real estate. However, cash transactions are a malaise of the real estate industry. The asset management company needs to have a strong internal control system and high ethical standards, to ensure fairness to investors.
  - Since the market is inherently illiquid, and real estate valuation is highly subjective, net asset values may or may not reflect the true realisable value.
    In order to address this risk, SEBI has insisted on Independent valuation of the properties of the REMF / REIT.
  - The illiquid nature of the asset has also forced SEBI to insist on REMF being closed-end and listed. Further, investors may be paid their maturity dues in phases, linked to sale of the underlying real estate assets by the AMC. In the case of REIT too, listing is mandatory.

A few schemes in the venture capital structure (discussed in the next section) have been launched as vehicles for real estate investment. But these were mostly privately offered to large investors with high investment requirement.

## 1.4. Venture Capital Funds

Equity mutual fund schemes primarily invest in equity shares that are listed in the stock exchanges. Venture Capital Funds (VCF) invest in shares of unlisted companies. They invest at a very early stage in a company, and thus, take a *project risk* i.e. the risk that the project may fail and the company may fold up. Such early stage businesses, where VCF invest, are referred to as *Venture Capital Undertakings* (VCU).

VCF are prepared to have a long investment horizon of 3 to 5 years or more. In return, they receive their shares at an extremely low valuation.

Unlike mutual funds, which are governed by the SEBI (Mutual Funds) Regulations, 1996, VCF were governed by the SEBI (Venture Capital) Regulations, 1996 (VC Regulations). On May 21, 2012, SEBI (Alternate Investment Fund) Regulations, 2012 (AIF Regulations) replaced the VC Regulations. However, the venture capital funds / schemes that were in existence as on that date, continue to be regulated by the earlier VC Regulations till the funds / schemes are wound up.

Under the AIF Regulations, “venture capital fund” means an Alternative Investment Fund which invests primarily in unlisted securities of start-ups, emerging or early-stage venture

capital undertakings mainly involved in new products, new services, technology or intellectual property right based activities or a new business model. By definition, venture capital funds include angel funds, which are discussed in the next section.

AIF regulations envisage three categories of funds:

- "Category I Alternative Investment Fund"- which invests in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the government or regulators consider as socially or economically desirable. This category includes venture capital funds, SME funds, social venture funds, infrastructure funds and such other alternative investment funds as may be specified by SEBI. Angel funds are a sub-category of venture capital funds that raise moneys from angel investors and comply with specified norms.
- "Category II Alternative Investment Fund"- which does not fall in Category I and III and which does not undertake leverage or borrowing other than to meet day-to-day operational requirements and as permitted in regulations
- "Category III Alternative Investment Fund"- which employs diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives

Salient features of the AIF regulations are as follows:

- The fund can be constituted as a trust or company
- *Equity linked instruments* include instruments convertible into equity shares or share warrants, preference shares and debentures convertible into equity.
- A VCF may raise money from any investor – Indian, Foreign or Non-Resident Indian (NRI), by issuing units.
- The minimum investment amount for investors in a VCF has been set at Rs 1 crore. The limit is Rs 25lakhfor employees or directors who are associated with the VCF.
- The fund can receive grants upto Rs 25 lakh. These cannot be serviced in the form of interest, dividend etc.
- The Manager or Sponsor needs to have a continuing interest in the AIF of not less than 2.5% of the corpus or Rs. 5 crore, whichever is lower.
- The VCF has to mobilise money through private placement. No scheme can have more than 1,000 investors.
- If the fund is constituted as a company, then it needs to comply with the requirements of Companies Act, 2013. In a private placement, as per the Companies Act, 2013, invitation cannot be made to more than 50 investors [other than Qualified Institutional Buyers (QIBs) and employees investing through Employee Stock Option Plans (ESOPs)].
- Every fund or scheme should have a minimum corpus of Rs 20 crore.
- The following investment related regulations are applicable for VCF:

- At least two-thirds of the investible funds should be invested in unlisted equity and equity related instruments of VCU or in companies listed or proposed to be listed on a SME exchange or SME segment of an exchange.
- Not more than one-third of the investible funds can be invested in:
    - Subscription to Initial Public Offer (IPO) of a VCU whose shares are proposed to be listed.
    - Debt of a VCU where the VCF has already invested in equity
    - Preferential allotment, including qualified institutional placement of a listed company subject to lock in period of 1 year
    - Equity shares or equity-linked instruments of financially weak or sick companies.
    - Special Purpose Vehicles (SPV) created by a VCF for facilitating or promoting investments.

It is clear that investors need to be extra-cautious, while investing in a VCF. The relatively high minimum investment keeps out the small investors. Other investors need to note the following risks:

- VCFs are not as closely monitored by the regulators, as mutual funds. Their disclosure requirements to investors are also not so stringently regulated.
- The project risk that the VCF takes is a significant risk for investors in the VCF.
- The asset profile of the VCF is largely illiquid. Therefore, illiquidity is another large risk that an investor in the VCF will have to be prepared for. On closure of the VCF, the investor may even receive the illiquid shares of the VCUs, where the VCF has invested.
- Illiquidity affects transparency in pricing, and therefore the valuation of investments.

## 1.5. Angel Funds

As mentioned earlier, Angel Funds are a category of VCF. However, the following distinctive provisions have been made for angel funds in the AIF regulations:

- "Angel investor" means any person who proposes to invest in an angel fund and satisfies one of the following conditions, namely,
  (a) an individual investor who has net tangible assets of at least two crore rupees excluding value of his principal residence, and who:
    i. has early stage investment experience (i.e. prior experience in investing in start-up or emerging or early-stage ventures), or
    ii. has experience as a serial entrepreneur (i.e. a person who has promoted or co-promoted more than one start-up venture), or
    iii. is a senior management professional with at least ten years of experience;
  (b) a body corporate with a net worth of at least ten crore rupees; or
  (c) an Alternative Investment Fund registered under the AIF Regulations or a VCF registered under the VC Regulations.

- Angel funds can only raise funds through issue of units to angel investors. The funds will be raised by private placement through issue of Information Memorandum / Placement Memorandum.
- Angel funds need to have a minimum corpus of Rs 10 crore.
- Minimum investment from an angel investor is Rs 25 lakhs. It can have upto 3 years maturity.
- No scheme of the angel fund shall have more than two hundred angel investors.
- Angel funds shall invest only in venture capital undertakings which:
  (a) have been incorporated during the preceding five years from the date of such investment;
  (b) have a turnover of less than twenty five crore rupees;
  (c) are not promoted or sponsored by or related to an industrial group whose group turnover exceeds three hundred crore rupees; and
  (d) are not companies with family connection with any of the angel investors who are investing in the company.
- Investment by an angel fund in any venture capital undertaking shall not be less than twenty-five lakh rupees and shall not exceed five crore rupees.
- Investment by an angel fund in the venture capital undertaking shall be locked-in for a period of one year.
- Angel funds shall not invest in associates.
- Angel funds shall not invest more than twenty-five per cent of the total investments under all its schemes in one VCU. The percentage is to be determined by the fund at the end of its tenure.
- They can invest in overseas VCU upto 25 per cent of their investible surplus.
- The manager or sponsor shall have a continuing interest in the angel fund of not less than two and half percent of the corpus or fifty lakh rupees, whichever is lesser, and such interest shall not be through the waiver of management fees.
- Units of angel funds shall not be listed on any recognised stock exchange.

## 1.6. Private Equity Funds

Private Equity Funds (PE Funds) do not invest in early stage businesses. They prefer businesses that have crossed the project risk stage, and need funds to scale up. Therefore, it is said that angels and VCs provide seed capital, while PEs provide growth capital.

The late investment reduces the risk that an investor in the PE Fund takes. The consequence of the later investment is that the PE Fund may get its shares at a higher valuation than the VCF, thus reducing the return on investment.

PE Funds have a shorter investment horizon than VCF. Typically, they expect to exit their investments in 1 to 3 years. They often invest just before the IPO of the VCU.

At times, public companies do not want to go through the public issue process to raise more equity. They then approach the PE Funds for investment. Such investments are called Private Investment in Public Equity (PIPE).

Besides the investment pattern, PE Funds (and VCF) are different from mutual funds in the following ways:

- At the first stage, they take firm commitments – not money. Every investor knows the size at which the fund has closed, and its share in the same. In order to ensure seriousness of commitment, a part of the commitment is collected upfront.
- The VCF keeps evaluating investment proposals from VCUs. Whenever it chooses to invest, the requirement for funds comes up. Accordingly, it calls for money, in proportion to each investor's share in the VCF. That is when the investors invest. The investor's investments in the VCF happen in phases, in line with the VCF's commitment to VCUs.
- Similarly, the VCF receives money as and when it sells its shareholding in a VCU. This would then go back to the investors proportionately. Thus, investors receive their money in phases.
- Besides a fixed management fee, investors are also charged a percentage on the profits earned by the fund.

Although the project risk is lower, investment in PE Funds is still risky. As with VCF, PE Funds are less closely regulated than mutual funds.

## 1.7. International Funds

International Funds help investors take exposures abroad. Besides the normal factors like type of security, sector, etc., these funds also entail a country factor, which translates into an exchange rate risk and political risk. The return of a domestic Indian investor in an international fund depends not only on the performance of the assets where the fund invests, but also the movement in the exchange rate between the Indian rupee and the currency of the country / countries where the fund invests.

Let us consider a simple example of an Indian fund that invests entirely in the US. Suppose it invested Rs 450mn on Day 1 (mn = million). Assuming the exchange rate was Rs 45 = 1USD, the investment would amount to Rs 450mn ÷ Rs 45 per USD i.e. USD 10mn.

If on Day 2, the value of the portfolio was to go up to USD 11mn, the portfolio has effectively yielded (11 – 10) ÷ 10 i.e. 10% return, in USD terms.

What was the return in rupee terms? For this, let us assume that the exchange rate on Day 2 is Rs 44 = 1USD. At this exchange rate, the portfolio would be valued at USD 11mn X Rs 44 per USD i.e. Rs 484mn. The return in rupee terms works out to (484 – 450) ÷ 450 i.e., 7.56%.

The portfolio return, which was 10% in USD terms, is only 7.56% in rupee terms. The decline in return in rupee terms is because the rupee became stronger i.e. the USD became weaker. On Day 1, the fund had to pay Rs 45 to buy 1 USD. But when it was converting the USD into rupees on Day 2, since the exchange rate on Day 2 is Rs 44 per USD, it will get only Rs 44 for 1 USD. The decline in the value of the USD brought down the returns in rupee terms.

As a general principle, an investor is better off, if the currency into which the portfolio is invested (in this case, USD) were to strengthen. In this example, the USD weakened. Therefore, the 10% USD return got dragged down to 7.56% return in rupees.

A resident Indian can remit up to USD 250,000, per financial year under the Liberalised Remittance Scheme (LRS), for permitted transactions including purchase of securities.

It is, however, difficult for retail investors to invest small amounts of money abroad. Therefore, funds make arrangements to receive money in rupees in a scheme in India. The Indian scheme in turn will either invest directly in securities abroad, or tie up to invest in a domestic fund of the country where it wants to invest.

For example, suppose a scheme is floated in India in rupees to give Indian investors the benefit of the US market. The fund will tie up with a scheme that would have been floated in the US, which would receive investments in USD. In such a case, the scheme floated in India is called a *feeder scheme*, while the scheme in the US is called the *host scheme*. Domestic Indian investors will invest in the feeder scheme, which will convert the corpus into USD and invest in the host scheme. The feeder scheme is really a FoF that is investing in the host fund.

On maturity, the host scheme will redeem the units and give the proceeds in USD to the feeder scheme, which will convert the USD into rupees and pay the domestic Indian investors.

Such an arrangement gives domestic Indian investors three benefits:

- They do not need to spend their time in understanding the US market; the host scheme does that job.
- They are able to take exposure to the US market with a small investment of Rs 5000. The feeder scheme facilitates this.
- This investment structure also leaves the USD 250,000 LRS limit untouched. The investor can use the entire LRS limit for other international transactions.
- At times, investors get excited about something because it is international. It is useful to note that if a country to which exposure is taken goes into recession, not only will the security markets perform poorly, but also the country's currency will become weaker. The investor is hurt both ways. Further, if a country runs into a balance of payments crisis, it may put restrictions on repatriation of international investments. Some funds reduce such country risk, by investing in a mix of countries.

The nature of investments that Indian funds can make abroad is governed by SEBI regulations. This is discussed in Chapter 2.

## Exercise

**Multiple Choice Questions**

1. An Indian fund invested USD 15mn in a foreign fund, when the exchange rate was Rs 46.67 = 1 USD. Over a period of time, the portfolio appreciated to USD 18mn, when the exchange rate was Rs 45 = 1 USD. What is the rupee portfolio return?
   a. 15.71%
   b. 10%
   c. -3.58%
   d. 16.42%

2. Fund of Funds can invest in other funds to the extent of
   a. One-third of the corpus
   b. Two-third of the corpus
   c. Three-fourth of the corpus
   d. The entire corpus

3. Which of the following is false of Exchange Traded Funds?
   a. Combine features of open-ended and close-ended
   b. Liquidity provided by market maker
   c. Receive subscriptions in money only post-NFO
   d. Can be bought through stock brokers

4. Which of the following entails the maximum project risk?
   a. Mutual Fund
   b. International Fund
   c. PE Fund
   d. VC Fund

**Answers**

1 – a, 2 – d, 3 – c*, 4-d

* During NFO it receives subscription in cash

# 2. Legal and Regulatory Environment of Mutual Funds

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Regulatory framework for Real Estate Mutual Funds and Real Estate Investment Trusts
- Investment norms for mutual funds
- Process for making changes in the structure of a mutual fund

## 2.1. Regulatory Framework for Real Estate Mutual Funds

As discussed in the previous chapter, SEBI has prescribed the regulatory framework for real estate mutual funds. Here we discuss various SEBI regulations with respect to Real Estate Mutual Funds.

### 2.1.1. Real Estate Asset

"Real estate asset" means an identifiable immovable property-
(i) which is located within India in such city as may be specified by SEBI from time to time or in a Special Economic Zone (SEZ);
(ii) on which construction is complete and which is usable;
(iii) which is evidenced by valid title documents;
(iv) which is legally transferable;
(v) which is free from all encumbrances;
(vi) which is not subject matter of any litigation.

But, it does not include-
I. a project under construction; or
II. vacant land; or
III. deserted property; or
IV. land specified for agricultural use; or
V. a property which is reserved or attached by any Government or other authority or pursuant to orders of a court of law or the acquisition of which is otherwise prohibited under any law for the time being in force.

### 2.1.2. Who can promote?

In MFD Workbook the norms based on which a sponsor can promote mutual fund operations are listed. Such an existing mutual fund may launch a real estate mutual fund scheme if it has adequate number of key personnel and directors having adequate experience in real estate.

The regulations also provide for real estate companies to launch real estate mutual fund schemes. The eligibility criteria are-

(a) the sponsor should have a sound track record and general reputation of fairness and integrity in all his business transactions.
Explanation: For the purposes of this clause "sound track record" shall mean the sponsor should—
(i) be carrying on business in real estate for a period of not less than five years; and
(ii) the networth is positive in all the immediately preceding five years; and
(iii) the networth in the immediately preceding year is more than the capital contribution of the sponsor in the asset management company; and
(iv) the sponsor has profits after providing for depreciation, interest and tax in three out of the immediately preceding five years, including the fifth year;

(b) the applicant is a fit and proper person;

(c) in the case of an existing mutual fund, such fund is in the form of a trust and the trust deed has been approved by SEBI;

(d) the sponsor has contributed or contributes at least 40% to the net worth of the asset management company:
Any person who holds 40% or more of the net worth of an asset management company is deemed to be a sponsor and will be required to fulfil the eligibility criteria;

(e) the sponsor or any of its directors or the principal officer to be employed by the mutual fund should not have been guilty of fraud or has not been convicted of an offence involving moral turpitude or has not been found guilty of any economic offence;

(f) trustees are to be appointed for the mutual fund;

(g) asset management company is to be appointed to manage the mutual fund and operate the schemes;

(h) custodian is to be appointed in order to keep custody of the securities or other assets or title deeds of real estate of the mutual fund, and provide such other custodial services as may be authorised by the trustees.

### 2.1.3. Scheme Features

- Every real estate mutual fund scheme needs to be close-ended and its units are to be listed on a recognized stock exchange.
- Redemption of a real estate mutual fund scheme may be done in a staggered manner.
- The units issued by a real estate mutual fund scheme shall not confer any right on the unit holders to use the real estate assets held by the scheme. Any provision to the contrary in the trust deed or in the terms of issue shall be void.
- The title deeds pertaining to real estate assets held by a real estate mutual fund scheme need to be kept in safe custody with the custodian of the mutual fund.

- A real estate mutual fund scheme cannot undertake lending or housing finance activities.
- All financial transactions of a real estate mutual fund scheme are to be routed through banking channels. Cash or unaccounted transactions are not permitted.
- The trustees are expected to review the market price of the units during the year, and recommend proportionate buy back of units from unit holders, if the units are traded at steep discount to the net asset value.
- The magnitude of discount which shall amount to steep discount is to be disclosed in the offer document.

### 2.1.4. Valuation and NAV

- The real estate assets held by a real estate mutual fund scheme are to be valued
  - at cost price on the date of acquisition; and
  - at fair price on every ninetieth day from the day of its purchase.

Detailed valuation norms have been prescribed by SEBI.

- The asset management company, its directors, the trustees and the real estate valuer has to ensure that the valuation of assets held by a real estate mutual fund scheme is done in good faith, in accordance with the norms specified. Further, the accounts of the scheme are to be prepared in accordance with the accounting principles specified.
- The net asset value of every real estate mutual fund scheme is to be calculated and declared at the close of each business day on the basis of the most current valuation of the real estate assets held by the scheme and accrued income thereon, if any.

### 2.1.5. Usage of Real Estate Assets

- The asset management company may let out or lease out the real estate assets held by the real estate mutual fund scheme if the term of such lease or letting does not extend beyond the period of maturity of the scheme.
- Where real estate assets are let out or leased out, the asset management company has to diligently collect the rents or other income in a timely manner.
- Real estate assets held by a real estate mutual fund scheme may be let out to the sponsor, asset management company or any of their associates, at market price or otherwise on commercial terms. However, not more than 25% of the total rental income of the scheme shall be derived from assets so let out.

## 2.2. Regulatory Framework for Real Estate Investment Trusts

The REIT Regulations, 2014 provide for the following:

### 2.2.1. Real Estate Asset

“Real estate asset” means properties owned by REIT whether directly or through a special purpose vehicle.

“Real estate” or “property” means land and any permanently attached improvements to it, whether leasehold or freehold and includes buildings, sheds, garages, fences, fittings, fixtures, warehouses, car parks, etc. and any other assets incidental to the ownership of real estate but does not include mortgage. It excludes any asset that falls within the Ministry of Finance’s definition of ‘infrastructure’.

"Special purpose vehicle" or "SPV" means any company or Limited Liability Partnership (LLP)
(i) in which the REIT holds or proposes to hold controlling interest and not less than fifty per cent of the equity share capital or interest;
(ii) which holds not less than eighty per cent of its assets directly in properties and does not invest in other special purpose vehicles; and
(iii) which is not engaged in any activity other than holding and developing property and any other activity incidental to such holding or development.

The REIT shall not invest in vacant land or agricultural land or mortgages other than mortgage backed securities. However, this does not apply to any land which is contiguous and extension of an existing project being implemented in stages.

### 2.2.2. Who can promote, manage and supervise?

- The sponsor, manager and trustee need to be separate entities.

- An REIT can have a maximum of three sponsors, each holding at least 5% of the total REIT units, post the initial offer to the public. All of them together need to hold at least 25% of the post initial offer REIT units.
  The minimum unit-holding needs to be held for at least 3 years. Thereafter, they need to hold at least 15% of the total REIT units at all times.
  Any excess over the minimum unit-holding will have to be held for at least 1 year from the date of listing.

- Each sponsor should have a net worth of at least Rs 20 crore, and all sponsors together should have net worth of at least Rs 100 crore.

- The sponsor or its associate(s) should have not less than five years of experience in development of real estate or fund management in the real estate industry. A developer desirous of being promoter should have completed at least two projects.

- Manager, who is a company or body corporate, should have a net worth of at least Rs 10 crore. If manager is LLP, its net tangible assets need to be at least worth Rs 10 crore.

The manager or its associate needs not less than five years of experience in fund management or advisory services or property management in the real estate industry or in development of real estate.

- The manager should have not less than two key personnel, each having not less than five years of experience in fund management or advisory services or property management in the real estate industry or in development of real estate.

- The manager should ensure that not less than half, of its directors in the case of a company or of members of the governing Board in case of an LLP, are independent and not directors or members of the governing Board of another REIT.

- The manager will have to execute an investment management agreement with the trustee that provides for the responsibilities of the manager.

- The Trustee should be registered with SEBI under SEBI (Debenture Trustees) Regulations, 1993 and cannot be an associate of the sponsor(s) or manager. Trustee will need to have the requisite infrastructure, personnel etc.

- The trustee and its associates shall not invest in units of the REIT in which it is designated as the trustee.

### 2.2.3. Structure

- Unlike mutual funds, REIT cannot promote multiple schemes. Each REIT is a complete investment unit.
- Multiple classes of units are not allowed.
- No unit holder of the REIT can enjoy preferential voting or any other rights over another unit holder.
- Initial offer of units can be made through public issue only. This needs to be done within 3 years of registration with SEBI. The period can be extended by 1 year in specific situations.
- At the stage of public issue, value of all the assets owned by REIT should be not less than Rs 500 crore. Offer to the public should be at least 25 per cent of the total units post-issue. Further, the offer size to the public should be at least Rs 250 crore.
- Subject to applicable regulations, the REIT may invite for subscriptions and allot units to any person, whether resident or foreign. Under both the initial offer and follow-on public offer, the REIT shall not accept subscription of an amount less than Rs 2 lakh from an applicant.
- Investors cannot be offered any guaranteed returns.
- Subscription amount should be kept in a separate bank account in the name of the REIT. It can only be utilized for adjustment against allotment of units or refund of money to the applicants till the time the units are listed.
- Units can be issued in dematerialised form only.
- Within 12 days of closure of offer, the units need to be mandatorily listed.

- Minimum trading lot for secondary market trades is Rs 1 lakh.
- At all times, the REIT should have at least 200 public unit-holders.
- Not less than seventy five per cent of the revenues of the REIT and the SPV, other than gains arising from disposal of properties, shall be, at all times, from rental, leasing and letting real estate assets or any other income incidental to the leasing of such assets.
- The aggregate consolidated borrowings and deferred payments of the REIT net of cash and cash equivalents shall never exceed forty nine per cent of the value of the REIT assets. This excludes security deposits refundable to tenants.
- Distributions:
    - Not less than ninety per cent of net distributable cash flows of the SPV shall be distributed to the REIT in proportion of its holding in the SPV, subject to applicable provisions in the Companies Act, 2013 or the Limited Liability Partnership Act,2008;
    - Not less than ninety per cent. of net distributable cash flows of the REIT shall be distributed to the unit holders;
    - Such distributions shall be declared and made not less than once every six months in every financial year and shall be made not later than fifteen days from the date of such declaration.
- For any sale of property, whether by the REIT or the SPV or for sale of shares or interest in the SPV by the REIT exceeding ten per cent of the value of REIT assets in a financial year, the manager shall obtain approval from the unit holders.
- The units can be redeemed through buyback or de-listing.

### 2.2.4. Valuation

- A full valuation of the REIT assets shall be conducted by the valuer within 3 months of the end of every financial year.
- A half-yearly valuation of the REIT assets shall be conducted by the valuer for the half-year ending on September 30 for incorporating any key changes in the previous six months. Such half-yearly valuation report shall be prepared within forty-five days from the last day of such half-year.
- The valuer shall not be an associate of the sponsor(s) or manager or trustee and shall have not less than five years of experience in valuation of real estate.
- With respect to purchase or sale of properties, from / to related parties, both prior to and after initial offer, two valuation reports from two different valuers, independent of each other, shall be obtained.
  Transactions for purchase of such assets shall be at a price not greater than, and transactions for sale of such assets shall be at a price not lesser than, the average of the two independent valuations.
- If it is not a related party transaction, a full valuation of the specific property shall be undertaken by the valuer. Approval of the unit holders is to be obtained if-

(1) in case of a purchase transaction, the property is proposed to be purchased at a value greater than one hundred and ten per cent of the value of the property as assessed by the valuer;
(2) in case of a sale transaction, the property is proposed to be sold at a value less than ninety per cent of the value of the property as assessed by the valuer.

- No valuer shall undertake valuation of the same property for more than four years consecutively. It can be reappointed after a period of not less than two years from the date it ceases to be the valuer of the REIT.
- The valuer(s) and any of its employees involved in valuing the assets of the REIT, shall not-
  (i) invest in units of the REIT or in the assets being valued; and
  (ii) sell the assets or units of REITs held prior to being appointed as the valuer, till the time such person is designated as valuer of such REIT and not less than six months after ceasing to be valuer of the REIT.

## 2.3. Investment Norms for Mutual Funds

Here we discuss SEBI norms for investment by different types of mutual fund schemes in various securities.

### 2.3.1. Equity / Debt Schemes

- A mutual fund scheme shall not invest more than 10% of its NAV in debt instruments (money market and non-money market instruments) issued by a single issuer that are rated not below investment grade by a credit rating agency authorised to carry out such activity under the Act.
  The investment limit may be extended to 12% of the NAV of the scheme with the prior approval of the Board of Trustees and the Board of the asset management company.
  - These limits are not applicable for investments in Government securities, Treasury Bills and Collateralised Borrowing and Lending Obligations (CBLO).
  - The limits are, however, applicable to all debt securities issued by public bodies or institutions such as electricity boards, municipal corporations, state transport corporations etc. guaranteed by either State or Central Government.
  - Under this limit, investment may be made in mortgage-backed securities (MBS) that are rated not below investment grade by a credit rating agency authorised to carry out such activity under the Act.

- A mutual fund scheme shall not invest more than 10% of its NAV in unrated debt instruments issued by a single issuer and the total investment in such instruments shall not exceed 25% of the NAV of the scheme.
  - All such investments shall be made with the prior approval of the Board of Trustees and the Board of the asset management company.

- Mutual Funds may, for the purpose of operational flexibility, constitute committees to approve investment proposals in unrated instruments. However, detailed parameters for investment in unrated debt instruments have to be approved by the Board of the AMC and Trustees.
- Details of such investments shall be communicated by the AMCs to the Trustees in their periodical reports, along with clear indication as to how the parameters set for investments have been complied with.
- Prior approval of the Board of the AMC and Trustees shall be required in case investment is sought to be made in an unrated security falling outside the prescribed parameters.

- No mutual fund under all its schemes should own more than 10% of any company's paid up capital carrying voting rights.

- No mutual fund scheme shall make any investment in—
  - any unlisted security of an associate or group company of the sponsor; or
  - any security issued by way of private placement by an associate or group company of the sponsor; or
  - the listed securities of group companies of the sponsor which is in excess of 25 per cent of the net assets.

- No mutual fund scheme shall invest more than 10 per cent of its NAV in the equity shares or equity related instruments of any company
  - The limit is not applicable for investments in case of index fund or sector or industry specific scheme.

- A mutual fund scheme shall not invest more than 5% of its NAV in the unlisted equity shares or equity related instruments in case of open ended scheme and 10% of its NAV in case of close ended scheme.

- Total exposure of any debt scheme in a particular sector cannot exceed 25% of its net assets.
  - Investment in bank Certificates of Deposits, CBLO, Government Securities, Treasury Bills and AAA-rated securities issued by Public Financial Institutions and Public Sector Banks and short term deposits with scheduled commercial banks are excluded from this limit.
  - Beyond the 25% mentioned above, an additional 5% can be invested in Housing Finance Companies (HFCs) registered with National Housing Bank and rated AA or above.
  - Total exposure to HFCs cannot be more than 25% (including the 5% limit mentioned above).

- Transfers of investments from one scheme to another scheme in the same mutual fund shall be allowed only if,—

- Such transfers are done at the prevailing market price for quoted instruments on spot basis.
- The securities so transferred shall be in conformity with the investment objective of the scheme to which such transfer has been made.

- No scheme of a mutual fund shall make any investment in any fund of funds scheme.

- A scheme may invest in another scheme under the same asset management company or any other mutual fund without charging any fees, provided that aggregate inter-scheme investment made by all schemes under the same management or in schemes under the management of any other asset management company shall not exceed 5% of the net asset value of the mutual fund.

  - This clause is not applicable to any fund of funds scheme.
  - It is also not applicable to investments in mutual funds in foreign countries made in accordance with these Guidelines.

- A fund of funds scheme is subject to the following investment restrictions:

  - A fund of funds scheme shall not invest in any other fund of funds scheme;
  - A fund of funds scheme shall not invest its assets other than in schemes of mutual funds, except to the extent of funds required for meeting the liquidity requirements for repurchases or redemptions, as disclosed in the offer document of fund of funds scheme.

- Every mutual fund shall buy and sell securities on the basis of deliveries and shall in all cases of purchases, take delivery of relevant securities and in all cases of sale, deliver the securities:

  - Sale of government security already contracted for purchase is permitted.

- A mutual fund may lend and borrow securities, or enter into short selling transactions on a recognised stock exchange, in accordance with the framework relating to short selling and securities lending and borrowing specified by SEBI.

  The Scheme Information Document (SID) needs to mention:

  - Intention to lend securities belonging to a particular mutual fund scheme.
  - Exposure limit with regard to securities lending, both for the scheme as well as for a single intermediary.
  - Risks factors such as loss, bankruptcy etc. associated with such transactions.

- The funds of a scheme shall not in any manner be used in carry forward transactions. However, the mutual fund may enter into derivatives transactions on a recognized stock exchange.

- The mutual funds having an aggregate of securities, which are worth Rs 10crore or more, as on the latest balance-sheet date, are to settle their transactions only through dematerialised securities.

- Mutual funds are not permitted to borrow except to meet temporary liquidity needs for repurchase, redemption of units or payment of interest or dividend to the unit-holders:
  Further, the borrowing cannot be more than 20 per cent of the net asset of the scheme and the duration of such a borrowing cannot exceed a period of six months.

- Mutual funds cannot advance any loans for any purpose.

- Mutual funds may enter into underwriting agreement after obtaining a certificate of registration in terms of the Securities and Exchange Board of India (Underwriters) Rules and Securities and Exchange Board of India (Underwriters) Regulations, 1993 authorising it to carry on activities as underwriters.
  - The underwriting obligation will be deemed as if investments are made in such securities.
  - The capital adequacy norms for the purpose of underwriting shall be the net asset of the scheme.
  - The underwriting obligation of a mutual fund cannot at any time exceed the total net asset value of the scheme.

- Pending deployment of funds of a scheme in terms of investment objectives of the scheme, a mutual fund may invest them in short term deposits of scheduled commercial banks.
  - "Short Term" for parking of funds by Mutual Funds is treated as a period not exceeding 91 days.
  - Such deposits shall be held in the name of the concerned scheme.
  - Mutual Funds shall not park more than 15% of their net assets in short term deposits of all scheduled commercial banks put together.
    This limit however may be raised to 20% with prior approval of the Trustees.
    Also, parking of funds in short term deposits of associate and sponsor scheduled commercial banks together shall not exceed 20% of the total deployment by the Mutual Fund in short term deposits.
  - Mutual Funds shall not park more than 10% of the net assets in short term deposits with any one scheduled commercial bank including its subsidiaries.
  - Trustees shall ensure that funds of a particular scheme are not parked in short term deposit of a bank which has invested in that scheme.
  - In case of liquid and debt oriented schemes, AMC(s) shall not charge any investment management and advisory fees for parking of funds in short term deposits of scheduled commercial banks.

- Half Yearly portfolio statements shall disclose all funds parked in short term deposit(s) under a separate heading. Details shall also include name of the bank, amount of funds parked, percentage of NAV.
- Trustees shall, in the Half Yearly Trustee Reports certify that provisions of the Mutual Funds Regulations pertaining to parking of funds in short term deposits pending deployment are complied with at all points of time. The AMC(s) shall also certify the same in its Compliance Test Reports [CTR(s)].
- Investments made in short term deposits pending deployment of funds shall be recorded and reported to the Trustees including the reasons for the investment especially comparisons with interest rates offered by other scheduled commercial banks.
- The above guidelines (other than the requirement of disclosure in the Half Yearly Portfolio statements) shall not apply to term deposits placed as margins for trading in cash and derivatives market. However, duration of such term deposits shall be disclosed in the Half Yearly Portfolio.

- Investment by liquid schemes and plans

  - These will make investment in /purchase debt and money market securities with maturity of upto 91 days only. All securities above 60-days of maturity need to be marked to market for valuation purposes.
    The maturity limit is also applicable in case of inter scheme transfer of securities.
    In case of securities where the principal is to be repaid in a single payout, the maturity of the securities shall mean residual maturity.
    In case the principal is to be repaid in more than one payout, the maturity of the securities shall be calculated on the basis of weighted average maturity of security.
    In case of securities with put and call options (daily or otherwise) the residual maturity of the securities shall not be greater than 91 days
  - In case the maturity of the security falls on a non-business day then settlement of securities will take place on the next business day.

- Investment by closed-end debt schemes

  - Close ended debt schemes shall invest only in such securities which mature on or before the date of maturity of the scheme.

- International investments

  - A dedicated fund manager has to be appointed for making the overseas investments.
  - The following investments are permitted:

    - ADR(s) and/or GDR(s) issued by Indian or foreign companies.
    - Equity of overseas companies listed on recognized Stock Exchanges overseas.

- Initial and Follow on Public Offerings for listing at recognized Stock Exchanges overseas.
- Foreign debt securities in the countries with fully convertible currencies, short term as well as long term debt instruments with rating not below investment grade by accredited/ registered credit rating agencies.
- Money Market Instruments rated not below investment grade.
- Repos in the form of investment, where the counterparty is rated not below investment grade; repo shall not however involve any borrowing of funds by Mutual Funds
- Government securities where the countries are rated not below investment grade.
- Derivatives traded on recognized stock exchanges overseas only for hedging and portfolio balancing with underlying as securities.
- Short term deposits with banks overseas where the issuer is rated not below investment grade.
- Units / securities issued by overseas Mutual Funds or unit trusts registered with overseas regulators and investing in
    - Aforesaid Securities
    - Real Estate Investment Trusts listed on recognized Stock Exchanges overseas or
    - Unlisted overseas securities, not exceeding 10% of their net assets.

### 2.3.2. Gold Schemes

- The funds of any such scheme are to be invested only in gold or gold related instruments in accordance with its investment objective, except to the extent necessary to meet the liquidity requirements for honouring repurchases or redemptions, as disclosed in the offer document; and
- Gold Deposit Scheme (GDS) and Gold Monetisation Scheme (GMS) of banks is a permitted gold-related instrument for investment by Gold ETFs. However, investment in GDS and GMS together cannot exceed 20% of the net assets of the scheme.
- Certificates issued in respect of investments made by Gold ETFs in GDS of Banks and GMS can be held by the mutual funds in dematerialized or physical form.
- Pending deployment of funds in accordance with the above, the mutual fund may invest its funds in short-term deposits of scheduled commercial banks.

### 2.3.3. Real Estate Mutual Funds (REMF)

- Every real state mutual fund scheme has to invest at least thirty five per cent of the net assets of the scheme directly in real estate assets.
- Further, every real estate mutual fund scheme will have to invest-
    - at least 75% of the net assets of the scheme in-
        - real estate assets

        - mortgage backed securities (but not directly in mortgages)
        - equity shares or debentures of companies engaged in dealing in real estate assets or in undertaking real estate development projects, whether listed on a recognized stock exchange in India or not

    - the balance in other securities

- Unless otherwise disclosed in the offer document, no mutual fund can, under all its real estate mutual fund schemes, invest more than thirty per cent of its net assets in a single city.
- No mutual fund can, under all its real estate mutual fund schemes, invest more than fifteen per cent of its net assets in the real estate assets of any single real estate project.

"Single real estate project" means a project by a builder in a single location within a city.

- No mutual fund can, under all its real estate mutual fund schemes, invest more than twenty five per cent of the total issued capital of any unlisted company.
- No mutual fund can invest more than fifteen per cent of the net assets of any of its real estate mutual fund schemes in the equity shares or debentures of any unlisted company.
- Real estate mutual fund schemes cannot invest in–

    - any unlisted security of the sponsor or its associate or group company
    - any listed security issued by way of preferential allotment by the sponsor or its associate or group company
    - any listed security of the sponsor or its associate or group company, in excess of twenty five per cent of the net assets of the scheme

- Mutual fund is not permitted to transfer real estate assets amongst its schemes.
- Mutual fund cannot invest in any real estate asset which was owned by the sponsor or the asset management company or any of its associates during the period of last five years or in which the sponsor or the asset management company or any of its associates hold tenancy or lease rights.

### 2.3.4. Real Estate Investment Trusts (REIT)

- At least 80 per cent of the REIT assets need to be in completed and rent generating assets.

- Not more than 10 per cent of the REIT assets can be in incomplete projects or other non-rent generating assets. Such incomplete or non-rent generating assets cannot be held for more than 3 years from completion / purchase.

- Not more than 20 per cent of the REIT assets can be invested in:
  (i) Incomplete or non-rent generating assets;

(ii) Listed or unlisted debt of companies or body corporate in real estate sector. This does not include investment in debt of SPVs;
(iii) Mortgage backed securities;
(iv) Equity shares of companies listed on a recognized stock exchange in India which derive not less than seventy five per cent of their operating income from real estate activity as per the audited accounts of the previous financial year;
(v) Government securities;
(vi) Unutilized FSI of a project where it has already made investment;
(vii) TDR acquired for the purpose of utilization with respect to a project where it has already made investment;
(viii) Money market instruments or cash equivalents.

- A REIT shall hold at least two projects, directly or through SPV. Not more than sixty per cent of the value of the assets, proportionately on a consolidated basis, shall be in a single project.

- A REIT shall hold any completed and rent generating property, whether directly or through SPV, for a period of not less than three years from the date of purchase of such property by the REIT or SPV.

- REIT cannot invest in other REITs or give loans to any person. Investment in debt securities is not treated as loan.

## 2.4. SEBI Norms for Mutual Funds' Investment in Derivatives[1]

Here we discuss SEBI norms for investment into derivative products by mutual fund schemes.

- The cumulative gross exposure through equity, debt and derivative positions should not exceed 100% of the net assets of the scheme.
- Mutual Funds shall not write options or purchase instruments with embedded written options.
- The total exposure related to option premium paid must not exceed 20% of the net assets of the scheme.

Exposure due to hedging positions is excluded from the above limits.

- Each position taken in derivatives shall have an associated exposure, which is the maximum possible loss that may occur on a position. However, certain derivative positions may theoretically have unlimited possible loss.

Exposure in derivative positions is computed as follows:

[1]The concept and application of derivatives are covered in Chapter 4.

- Long Future

  Futures Price * Lot Size * Number of Contracts

- Short Future

  Futures Price * Lot Size * Number of Contracts

- Option bought

  Option Premium Paid * Lot Size * Number of Contracts.

- Cash or cash equivalents with residual maturity of less than 91 days may be treated as not creating any exposure.
- Mutual Funds may enter into plain vanilla interest rate swaps for hedging purposes.
  - The counter party in such transactions has to be an entity recognized as a market maker by RBI.
  - Further, the value of the notional principal in such cases must not exceed the value of respective existing assets being hedged by the scheme.
  - Exposure to a single counterparty in such transactions should not exceed 10% of the net assets of the scheme.
- Mutual funds may participate in Credit Default Swap (CDS) transactions, but only as protection buyers i.e. they can hedge the credit risk they carry in their portfolio. Exposure to a single counterparty in CDS transactions shall not exceed 10% of the net assets of the scheme.

## 2.5. SEBI Norms with respect to Changes in Controlling Interest of an AMC

Here we discuss SEBI norms with respect to change in controlling interest of the Asset Management Company.

- No change in the controlling interest of the asset management company can be made unless,
  - Prior approval of the trustees and the Board (i.e. SEBI) is obtained;
  - A written communication about the proposed change is sent to each unit-holder, and an advertisement is given in one English daily newspaper having nationwide circulation, and in a newspaper published in the language of the region where the Head Office of the mutual fund is situated; and
  - The unit-holders are given 30 days to exit on the prevailing Net Asset Value without any exit load.

- In case the applicant proposing to take the control of the mutual fund is not an existing mutual fund registered with SEBI, it should apply to SEBI for registration under SEBI (Mutual Funds) Regulations, 1996.
- In case of new sponsors, or in case of taking over of the schemes by an existing mutual fund, undertakings on the following lines are required to be given in the interest of unit-holders:

    - Taking full responsibility of the management and the administration of the schemes including the matters relating to the reconciliation of accounts (as if the schemes had been floated by the new trustees on the date of taking over).
    - Assumption of the trusteeship of the assets and liabilities of the schemes including unclaimed dividends and unclaimed redemptions.
    - Assuming all responsibilities and obligations relating to the investor grievances, if any, in respect of the schemes taken over, in accordance with and pursuant to the SEBI (Mutual Funds) Regulations.

- While seeking the approval of SEBI for change in the controlling interest of the asset management company, the mutual fund handing over the control to another person, should also file the draft letter to be sent to the unit-holders.

The draft letter to the unit-holders should include the following information –

- The activities of the new sponsor and its financial performance as prescribed in the standard offer document;
- In case of taking over of the schemes by an existing mutual fund registered with SEBI, the draft letter should also include the condensed financial information of all the schemes in the format prescribed in the standard offer document;
- The amount of unclaimed redemption and dividend and also the procedure for claiming such amount by the unit-holders.

- The information given in the offer documents of existing schemes shall be revised and updated pursuant to the change in controlling interest of the mutual fund. Such addendum shall also be filed with SEBI.

- In case of any other situation like change in indirect control of the asset management company, or change in the promoters of the sponsor etc., the mutual fund should provide full information to SEBI for advice on the further course of action.

## 2.6. Changes in Mutual Fund Schemes

### 2.6.1. Change in Fundamental Attributes

“Fundamental Attributes” includes:

- Type of a scheme

a. Open ended/Close ended/Interval scheme

b. Sectoral Fund/Equity Fund/Balanced Fund/Income Fund/Debt Fund/Index Fund/Any other type of Fund

- Investment Objective(s)

a. Main Objective - Growth/Income/Both.

b. Investment pattern - The tentative Equity/Debt/Money Market portfolio break-up with minimum and maximum asset allocation, while retaining the option to alter the asset allocation for a short term period on defensive considerations.

- Terms of Issue

a. Liquidity provisions such as listing, repurchase, redemption.

b. Aggregate fees and expenses charged to the scheme.

c. Any safety net or guarantee provided.

The trustees have been made responsible in case there is a change in the fundamental attributes of any scheme or the trust or fees and expenses payable or any other change which would modify the scheme and affect the interest of unit-holders that such changes cannot be carried out unless,—

(i) a written communication about the proposed change is sent to each unit-holder and an advertisement is given in one English daily newspaper having nationwide circulation as well as in a newspaper published in the language of the region where the Head Office of the mutual fund is situated; and

(ii) the unit-holders are given an option to exit at the prevailing Net Asset Value without any exit load.

The Scheme Information Document (SID) is to be revised and updated immediately after completion of the duration of the exit option.

### 2.6.2. Conversion of Closed-End Scheme to Open-End Scheme

In case of a conversion of closed-end scheme to open-end scheme:

- Disclosures contained in the SID need to be revised and updated. A copy of the draft SID will have to be filed with SEBI.
- A draft of the communication to be sent to unit holders needs to be submitted to SEBI, which will include the following:
    - Latest portfolio of the scheme(s) in the prescribed format
    - Details of the financial performance of the scheme(s) since inception in the format prescribed in SID, along with comparisons with appropriate benchmark(s).
    - The addendum to the SID detailing the modifications (if any) made to the scheme(s).
- The letter to unit holders and revised SID (if any) can be issued only after the final observations as communicated by SEBI have been incorporated and final copies have been filed with SEBI.

- Unit holders need to be given at least 30 days to exercise exit option. During this period, the unit holders who opt to redeem their holdings in part or in full shall be allowed to exit at the NAV applicable for the day on which the request is received, without charging exit load.

### 2.6.3. Consolidation of Schemes

Any consolidation or merger of mutual fund schemes will normally be treated as a change in the fundamental attributes of the related schemes. Therefore, the mutual fund needs to comply with the requirements specified in section2.6.1.
Further, in order to ensure that all important disclosures are made to the investors of the schemes sought to be consolidated or merged and their interests are protected, mutual funds have to take the following steps:

- Approval by the Board of the AMC and Trustee(s):
- The proposal and modalities of the consolidation or merger shall be approved by the Board of the AMC and Trustee(s), after they ensure that the interest of unit holders under all the concerned schemes have been protected in the said proposal.
- Subsequent to approval from the Board of the AMC and Trustee(s), mutual funds shall file the proposal with SEBI, along with the draft SID, requisite fees (if a new scheme emerges after such consolidation or merger) and draft of the letter to be issued to the unit holders of all the concerned schemes.
- The letter addressed to the unit holders, giving them the option to exit at prevailing NAV without charging exit load, shall disclose all relevant information enabling them to take well informed decisions. This information will include, inter alia:

    - Latest portfolio of the concerned schemes.
    - Details of the financial performance of the concerned schemes since inception in the format prescribed in SID along with comparisons with appropriate benchmarks.
    - Information on the investment objective, asset allocation and the main features of the new consolidated scheme.
    - Basis of allocation of new units by way of a numerical illustration
    - Percentage of total NPAs and percentage of total illiquid assets to net assets of each individual scheme(s) as well the consolidated scheme.
    - Tax impact of the consolidation on the unit holders.
    - Any other disclosure as specified by the Trustees.
    - Any other disclosure as directed by SEBI.

- Update of SID shall be as per the requirements for change in fundamental attribute of the scheme.
- Maintenance of Records:

    - The AMC(s) shall maintain records of dispatch of the letters to the unit-holders and the responses received from them.

- A report giving information on total number of unit holders in the schemes and their net assets, number of unit holders who opted to exit and net assets held by them and number of unit holders and net assets in the consolidated scheme shall be filed with the Board within 21 days from the date of closure of the exit option.

- Merger or consolidation shall not be seen as change in fundamental attribute of the surviving scheme if the following conditions are met:

  - Fundamental attributes of the surviving scheme do not change. The 'surviving scheme' means the scheme which remains in existence after the merger.
  - Mutual Funds are able to demonstrate that the circumstances merit merger or consolidation of schemes and the interest of the unit-holders of the surviving scheme is not adversely affected.
  - After approval by the Boards of AMCs and Trustees, the mutual funds shall file such proposal with SEBI. SEBI would communicate its observations on the proposal within the time period prescribed.
  - The letter to unit-holders is issued only after the final observations communicated by SEBI have been incorporated and final copies of the same have been filed with SEBI.

### 2.6.4. Launch of Additional Plans

- Additional plans sought to be launched under existing open ended schemes which differ substantially from that scheme in terms of portfolio or other characteristics shall be launched as separate schemes in accordance with the regulatory provisions.
- However, plan(s) which are consistent with the characteristics of the scheme may be launched as additional plans as part of existing schemes by issuing an addendum.
- Such proposal should be approved by the Board(s) of AMC and Trustees.
- The addendum shall contain information pertaining to salient features like applicable loads, expenses or such other details which in the opinion of the AMC/ Trustees is material.
- The addendum shall be filed with SEBI 21 days in advance of opening of plan(s).
- AMC(s) shall publish an advertisement or issue a press release at the time of launch of such additional plan(s).
- Schemes cannot differentiate between plans based on amount of investment. Fresh subscriptions are permitted only under one plan.
- Every scheme needs to offer a separate plan for direct investments, i.e., investments not routed through a distributor, in existing as well as new schemes.

### 2.6.5. Other Changes

- The AMC is required to issue an addendum and display it on its website.

- The addendum needs to be circulated to all the distributors/ brokers/ Investor Service Centre (ISC) so that the same can be attached to copies of SID already in stock, till the SID is updated.
- In case any information in SID is amended more than once, the latest applicable addendum shall be a part of SID. (For example, in case of changes in load structure the addendum carrying the latest applicable load structure shall be attached to all Key Information Memorandum (KIM) and SID already in stock till it is updated).
- A public notice is to be given in respect of such changes in one English daily newspaper having nationwide circulation as well as in a newspaper published in the language of region where the Head Office of the Mutual Fund is situated.
- The account statements issued to investors need to indicate the applicable load structure.
- Any material changes in the Statement of Additional Information (SAI) shall be made on an ongoing basis by way of update on the Mutual Fund and AMFI website. The effective date for such changes shall be mentioned in the updated SAI.
- A soft copy of the updated SID / SAI has to be filed with SEBI in PDF Format along with printed copy of the same.
- AMC also has to submit an undertaking to SEBI, while filing the soft copy, that information contained in the soft copy of SID / SAI to be uploaded on SEBI website is current and relevant and matches exactly with the contents of the hard copy, and that the AMC is fully responsible for the contents of the soft copy of the SID / SAI.

## Exercise

**Multiple Choice Questions**

1. Which of the following can launch real estate mutual funds in India?
   a. Existing AMCs
   b. Real Estate Companies
   c. Either of the above
   d. None of the above

2. A mutual fund scheme shall not invest more than __% of its NAV in unrated debt instruments issued by a single issuer.
   a. 5%
   b. 10%
   c. 15%
   d. 20%

3. Mutual funds cannot get into underwriting contracts.
   a. True
   b. False

4. Liquid schemes and plans can make investment in (i.e., purchase debt and money market securities) with maturity of upto 182 days.
   a. True
   b. False

**Answers**

1 – c, 2 – b, 3 – b, 4-b

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# 3. Fund Distribution and Sales Practices

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- New channels of MF distribution such as internet and stock exchanges

Traditionally, transactions in units of mutual fund schemes have been effected as follows:

- New Fund Offer

The investor submitted the application for purchase, along with cheque / demand draft, to the AMC or an authorised banker of the AMC or a distributor or the registrar & transfer agent (RTA).

- *Post-NFO Transactions in Open-end schemes*

Sale or re-purchase requests would be submitted to the AMC, distributor or RTA. Accordingly, the AMC would issue new units to the investor (increase in unit capital) or re-purchase existing units of the investor (decrease in unit capital).

- *Post-NFO Transactions in Closed-end schemes*

These schemes are listed in an exchange. Therefore, investors would need to go to a stock broker to sell their units or buy more units. The units would be transacted between a seller and a buyer for those units through one or more stock brokers in the stock exchange. The unit capital of the scheme would remain the same. The only change would be replacement of the seller's details by the name and other details of the buyer of those units.
Investors who did not know a stock broker would go to a distributor, who would pass on the request to a stock broker.
Investors who did not want to transact in a stock exchange, would receive the proceeds on maturity or early redemption of the closed-end scheme. The AMC would cancel the units and pay the value of the units to the investor on such maturity or early redemption of the closed-end scheme.

- *Exchange Traded Fund (ETF)*

As already discussed in Chapter 1, ETFs combine the features of open-end and closed-end schemes.

## Newer Channels of Mutual Fund Distribution

Although the traditional approaches to transacting in units continue, several newer developments have changed the complexion of mutual fund transactions in the country. A key enabler has been dematerialisation.

As explained in the MFD Workbook, dematerialisation has eliminated the need for Unit Certificates to be issued to the investor. Instead, an electronic record of the unit-holding is maintained with a depository.

SEBI has made it mandatory for AMCs to give unit-holders the right to hold their units of mutual fund schemes in demat form. The unit-holder can state his preference at the NFO stage itself. Even later, the investor can request the conversion of physical units into demat form.

Dematerialisation has made it possible to transact in units quickly, through the internet and stock exchanges. Even pledge of units, as security for financing transactions, is possible.

## 3.1. Internet and Mobile Technologies

With the emergence of internet technology, it has become possible to transact in units without having to visit the offices of the AMC or distributor or RTA. The following internet channels are available:

- ***Websites of AMCs***

Almost every AMC offers the facility to existing folio-holders to buy new units or offer their existing units for re-purchase, through the AMC website. Only once, for their first transaction with the AMC (when the folio is created), they need to establish physical contact with the AMC, distributor or RTA, to sign the forms and hand them over. Thereafter, all future transactions with the concerned AMC can happen through the internet.

Some AMCs offer investors the facility of even making the first investment through the net. However, the units are made available to the investor only when they sign and send a print of their online application.

A few AMCs have completely removed the requirement of a physical signature, even for the first investment. Units are issued on the basis of online KYC check with the records of the registrar, and payment made through an online banking account. The digital image of the signature of the investor in the KYC records is used, so that the requirement of physical signature at the investment application stage is eliminated.

In the case of re-purchase, the moneys would be directly transferred to the unit-holder's bank account.

Payment for fresh purchases can be done through any of the following internet channels:

- The payment gateway on the website will lead to the log-in page of the unit-holder's bank account. With the user name and password of his internet-enabled bank account (provided by his bank), the unit-holder can transfer moneys from his bank account to the bank account of the AMC. A benefit of using this facility is that in the records of the AMC, the unit-holder's application and money transfer are directly linked.

- The unit-holder can also do a transfer directly from his bank account to the AMC's bank account through National Electronic Fund Transfer (NEFT) / Real Time Gross Settlement (RTGS) / Immediate Payment Service (IMPS)/ United Payment Interface (UPI) facility provided by his bank. The limitations of this mode of transfer are:
    - The unit-holder will first need to check with the AMC or its website on the details of the AMC's bank account or mobile phone number into which money has to be transferred.
    - In the case of NEFT and RTGS, the unit-holder will have to add the AMC's bank account as a registered beneficiary in his bank account. Thereafter, the unit-holder will have to transfer moneys to the AMC's bank account. Some banks allow transfers only 24 hours after a beneficiary is added.
    - Since the purchase request and money transfer happen as independent transactions, the unit-holder may need to separately co-ordinate with the AMC to ensure that the units are made available without delay. This increases the processes at the AMC end too. For this reason, some of the AMCs do not encourage this mode of transfer, especially for small investments.
    - The unit-holder's bank may charge a fee for the transfer transaction. This may be avoided when the payment is made through the AMC's website (through their payment gateway). Further, there may be limits on how much the unit-holder's bank allows to be transferred through these internet or mobile based facilities in a single day.
- Some AMCs also receive small value investment requests through credit card payments. The unit-holder should check on the costs, if any, that the credit card issuer will charge him for the transaction.
- Mobile wallets are emerging as another payment mechanism in the country.

A limitation is that each AMC website allows transaction in only its schemes. Therefore, a unit-holder who wants to transact with multiple AMCs will have to visit multiple websites.

- ***Websites of Distributors***

Many large distributors offer the facility of buying and selling units through their website. The transactions would be similar to the AMC websites, discussed earlier. One physical interaction may be necessary at the outset, to comply with the KYC norms. Thereafter, transactions can happen through the Internet.

A benefit of transacting through the distributor's website is that it will allow the unit-holder to transact in units of several AMCs, with whom the distributor has tied up. Thus, the need to visit multiple AMC websites is significantly avoided.

As with any transaction on the net, the unit-holder should ensure that the website is genuine. Before entering the user-name and password, the unit-holder should check for the padlock symbol in the address bar. The symbol is an indication that the website has been verified by VeriSign (an independent assurance provider) to be a genuine site, whose connection to the server is encrypted and therefore, secure.

Unit-holders can access the websites using smart-phones. In that sense, even today, it is possible to transact in mutual fund units, using advanced handsets.

Besides, applications (Apps) are increasingly being used. These can be downloaded on the smart-phone and tablet for easy and secure transactions.

Using Wireless Application Protocol (WAP), some transactions can be effected even without accessing the web-browser.

Given India's geographic spread, and popularity of mobile phones, this can become an important medium for transacting in mutual fund units.

## 3.2. Stock Exchanges

- Listed Units

It is mandatory for closed-end schemes to be listed in the stock exchange. ETFs, by definition, are listed in the stock exchange. It is therefore possible to trade on these units through the stock exchange trading system.

All that is required is an on-line trading account and demat account. Only demat units can be traded in the exchange. Further, to ensure timely payments, it is advisable that the investor also have an internet-enabled banking account.

Further, the investor grievance handling process of the stock exchange is available.

- Transaction Engines

Besides offering a platform for trading in listed units, BSE and NSE have also developed transaction engines for mutual funds. NSE's platform is called NEAT MFSS. BSE's platform is BSE StAR Mutual Funds Platform. Both depositories, CDSL and NSDL are linked to the transaction engines.

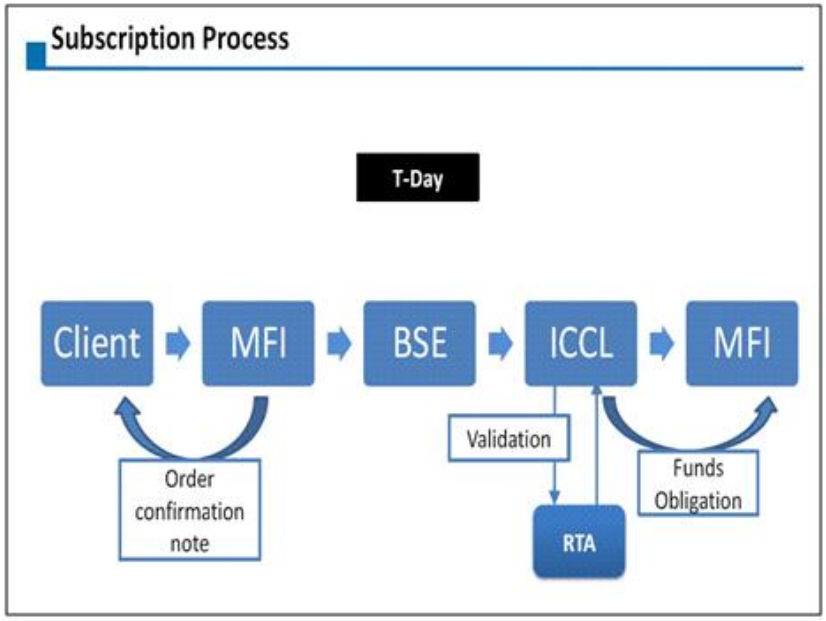
These engines help stock-brokers in managing mutual fund applications (fresh purchases, repeat purchases, SIP, redemptions) of investors. The investor can transact in physical units or demat units. In the latter case, the investor's demat account needs to be registered with the broker.

The engines are available for transactions from 9 am to 3 pm on every working day. The objective is to use the stock exchange infrastructure to widen the reach of mutual funds in the country.

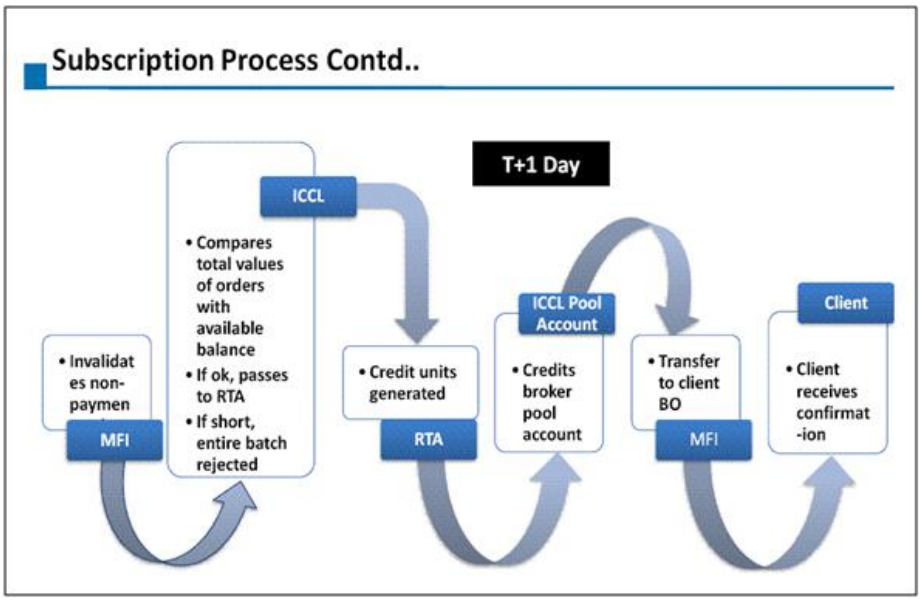
AMCs can tie up with either or both the stock exchanges to enable members (brokers) of the stock exchange to offer mutual fund services to investors in those AMCs. The broker needs to have an AMFI Registration Number to offer the mutual fund services. Besides, he needs to be empanelled with the AMC whose schemes he would like to deal in.

Purchase is allowed only in amount (Rs); sale is allowed only in number of units. The units / money are credited to the broker's pool account, from which the broker transfers to the investor's DP account / bank account.

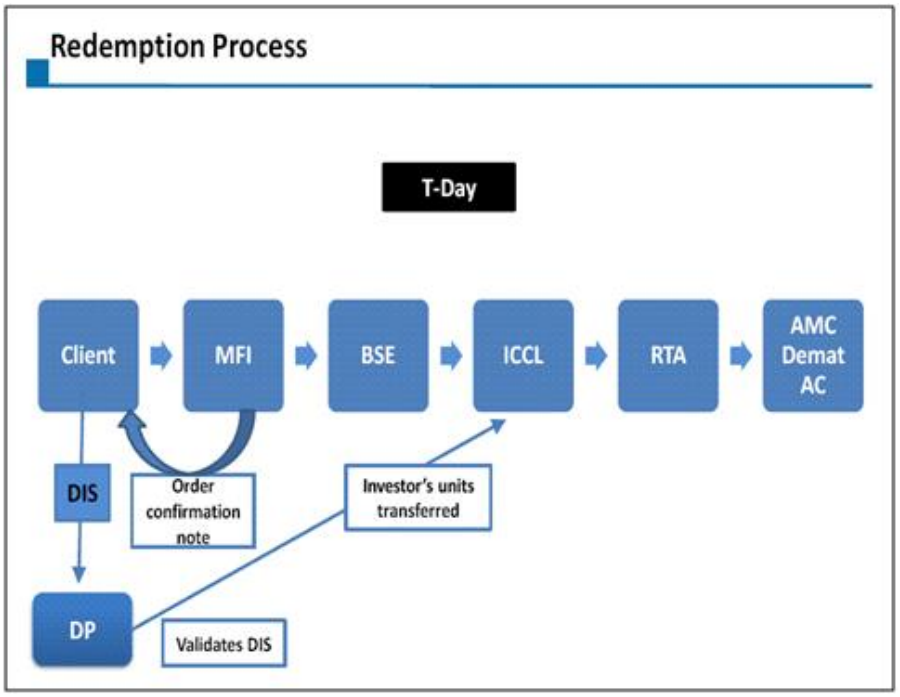
The process is broadly similar in both exchanges. The following extracts from the User Manual of BSE StAR are illustrative.

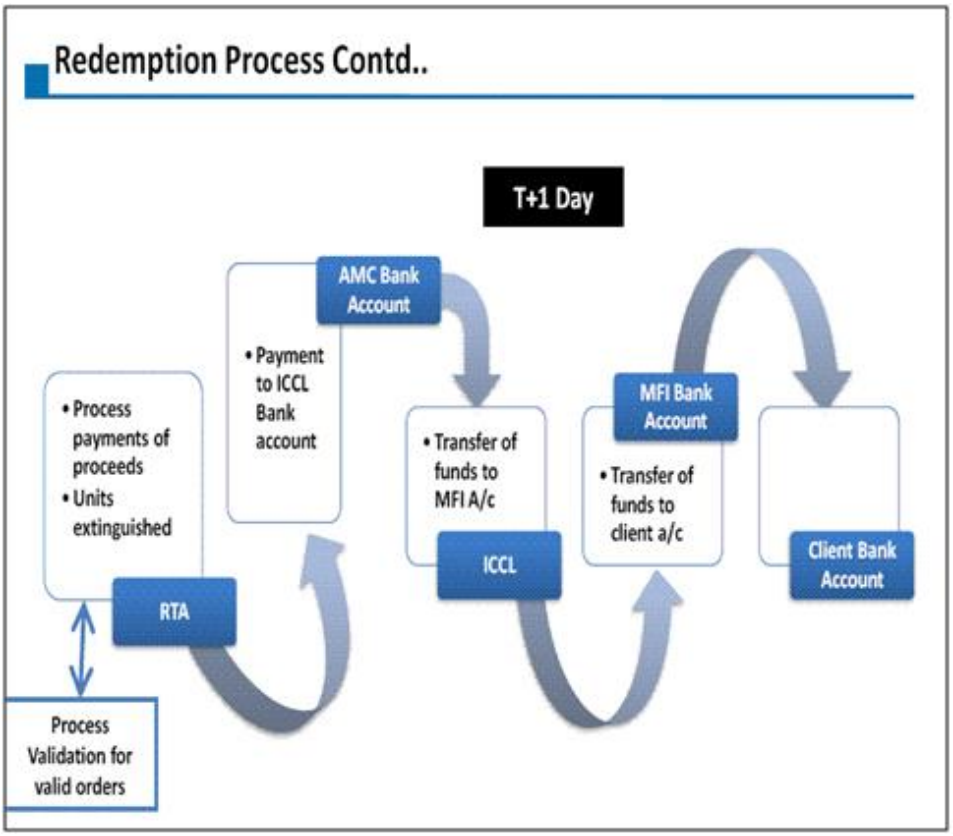



(In the charts, MFI refers to Mutual Fund Intermediary i.e. the stock broker; ICCL refers to Indian Clearing Corporation Limited, which is BSE's clearing house.)



For Liquid Schemes in L0 Category (Historical NAV) and Debt / Equity Schemes in L1 Category, the cut-off time for subscription and funds is 1:00 p.m. to avail the benefit of Historical NAV (L0 Category) and T day NAV (L1 Category). In Liquid Schemes in L0 Category, units are allotted on the T day. This is elaborated in the detailed time-table featured later in this section.



The following are various time-tables for:

- Subscription Activities

| Process | Time | | |
|---|---|---|---|
| | T Day | | |
| | L0 | L1 | Normal |
| Upload the final subscription transaction feed to RTAs for all the valid purchase transactions received from 9:00 a.m. to 3:00 p.m. (L0/L1 upto 1:00 p.m). In case of any rejections from the RTA then the same would be rejected from the Exchange's system and will not be considered for any further process | 1:00 p.m. | 1:00 p.m. | 3:30 p.m. |
| Download of valid order transaction file and obligation statement to brokers | 1:15 p.m. | 1:15 p.m. | 5:00 p.m. |
| Download of Bank wise / Member wise Pay-in files to respective Clearing Banks | 1:15 p.m. | 1:15 p.m. | 6:00 p.m. |
| | **T Day** | **T Day** | **T+1 Day** |
| Fate of Pay-in to be received from Clearing Banks | 1:30 p.m. | 2:00 p.m. | 9:30 a.m. |
| Credit confirmation to be given to the RTAs | 1:45 p.m. | 2:45 p.m. | 10:30 a.m. |
| Transfer of Funds related to subscription transactions to the credit of AMC account | Before 2:00 p.m. | Before 3:00 p.m. | Before 12:00 noon |
| | | **L1/Normal** | |
| Receipt of Reverse Feed File for subscription transactions | 2:00 p.m. | 11:30 a.m. | |
| Uploading of Corporate Action (CA) file to both the Depositories (Done by RTA/AMC) | Before 3:30 p.m. | Before 2:30 p.m. | |
| Processing of CA file and generation of the Units in AMC beneficiary account (Done by Depository under instructions of RTA/AMC) | Before 3:30 p.m. | Before 2:30 p.m. | |
| Transfer of the units from AMC Beneficiary account to AMC Pool account in NSDL depository (Done by Depository under instructions of RTA/AMC) | Before 3:30 p.m. | Before 2:30 p.m. | |
| Making the Client level pay-in from the AMC beneficiary account to BSE's Clearing Corporation | Before 3:30 p.m. | Before 2:30 p.m. | |
| Uploading of Auto DO instructions by the ICCL in NSDL Depository | Not Applicable | Before 2:30 p.m. | |
| Receipt of Pay-in files from both the Depositories | By 3:45 p.m. | By 2:45 p.m. | |
| Uploading the pay-out file in both the Depositories resulting in transfer of units in Broker's Pool Account | By 4:00 p.m. | By 3:00 p.m. | |

- Redemption Activities

| T Day | |
|---|---|
| **Process** | **Time** |
| Upload the validation transaction feed to RTA's for all the valid redemption transactions received up to 03:00 p.m. In case of any rejections from the RTA, the same would be rejected from the Exchange's system and will not be considered for any further process | 3:30 p.m. |
| Investors to give the DIS in respect of the units redeemed to their respective Depository Participant (DP) | Latest up to 04:30 p.m. |
| Clearing house to upload the Receipt in file in both the depositories to enable the transfer of units from the Investors account to the Clearing House account | Up to 04:30 p.m. |
| Clearing house to upload the Delivery Out file in both the Depositories to enable transfer of units from Clearing House account to the AMC beneficiary account | Up to 05:30 p.m. |
| Exchange to upload the final Redemption transaction feed to RTA for all the valid redemption transactions received up to 03:00 p.m. and those transactions in case of which securities are received by the Clearing House and transferred to AMC beneficiary account. | Up to 06:00 p.m. |

**T + 1 Day**

| Process | Time |
|---|---|
| Receipt of Reverse Feed File for valid Redemption Transactions in case of both Debt/Liquid and Equity Scheme | 09:30 a.m. |
| Credit of ICCL Bank Account for Valid Redemption transactions in case of Debt and Liquid Scheme | 11:30 a.m. |
| Transfer of Funds Pay-out in respect of Debt / Liquid Scheme to the Broker's Bank Account | 01:00 p.m. |

Transactions in demat units are conveniently conducted through the net. For physical transactions, the related papers will need to be handed over to the stock broker in time for them to be passed on to the AMC / RTA by 4 pm the same day.

The transaction slip generated by the software, also includes the time stamp. This serves the purpose of an acknowledgement for the investor.

In case of Debt Schemes, transactions for subscription of Rs1 crore and above are not allowed in transaction engine.

Since the stock exchange is only a facilitator, while the AMC is the counter-party for the investor's transactions, the transactions are not protected by the settlement guarantee

fund. However, the investor grievance handling mechanism is available for application-related issues. The issues related to allotment need to be taken up with the RTA / AMC concerned.

## *Exercise*

**Multiple Choice Questions**

1. Which of the following is true?
   a. All mutual fund units need to be in physical form
   b. All mutual fund units need to be in demat form
   c. Investor has the option of choosing between physical and demat form
   d. Transaction in stock exchange only happens in physical units

2. An investor wants to transact in units of multiple AMCs. Which is likely to be the most convenient website to do the transactions?
   a. Website of any AMC
   b. Website of large distributor
   c. AMFI Website
   d. SEBI Website

3. For a purchase through the transaction engine of a stock exchange, the new units will be first credited to _____.
   a. Demat account of investor
   b. Pool account of the stock-broker
   c. Either (a) or (b) at the option of investor
   d. Either (a) or (b) at the option of the stock-broker

4. Which of the following is required for online trading in Units in a stock exchange
   a. Online trading account
   b. Demat account
   c. Both (a) and (b)
   d. (a), (b) and internet-enabled bank account

**Answers**

1 – c, 2 – b, 3 – b, 4-c*

* Internet-enabled bank account is recommended but not mandatory.

# 4. Investment and Risk Management

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Fundamental Analysis
- Technical Analysis
- Quantitative Analysis
- Application of Derivatives

## 4.1. Fundamental Analysis

### 4.1.1. Introduction

More than 1,500 companies are listed in the National Stock Exchange. The number in Bombay Stock Exchange is in excess of 5000.

One approach to evaluating these equity shares and managing the investment in them is *fundamental analysis*. Here, the analyst evaluates the fundamentals of the company viz. the company's management, competitive position in its industry, growth prospects, financial statements, regulatory environment etc. Accordingly, decisions are taken to buy, hold or sell the investments.

### 4.1.2. Top-down v/s Bottom-up Approach

In a top-down approach, the portfolio manager starts with an economic analysis. Different economies and sectors are evaluated, to identify attractive pockets of investment. Based on this, capital allocation between different countries and / or sectors is decided. Thereafter, individual stocks are selected for investment.

In a bottom-up approach, the portfolio manager looks for good stocks to pick, irrespective of the sectors they belong to. Thus, sectoral allocation in the portfolio is not a conscious call, but a consequence of the stocks picked.

### 4.1.3. Ratios

A fundamental analyst relies heavily on financial ratios. The working of some of the commonly used ratios is explained below:

- Price/ Earnings Ratio (P/E Ratio)

Suppose, the Profit after Tax (PAT) of Tata Steel for 2010-11 is Rs 6,000 crore, and the company has issued 100 crore shares.
The Earnings per Share (EPS) would be: PAT ÷ No. of equity shares
i.e., Rs 6,000crore ÷ 100crore

i.e., Rs 60

If the shares of the company are being traded at Rs 480 (market price), then the P/E Ratio can be calculated as

Market Price ÷ EPS

i.e., Rs 480 ÷ Rs 60 i.e., 8 times

Since the P/E Ratio has been calculated based on past profits, it is called *trailing P/E* or *historical P/E.* Markets tend to trade based on *forward P/E* i.e. projected profits. In July 2011, if the analyst estimates Tata Steel's PAT for 2011-12 to go up to Rs 8,000crore, and assuming the capital structure to be the same, the projected EPS for 2011-12 would be Rs 8,000crore ÷ 100crore i.e. Rs 80. Accordingly, the forward P/E ratio would be Rs 480 ÷ Rs 80 i.e. 6 times.

A fundamental analyst will compare this with other steel companies, such as SAIL. On this basis, he will decide the steel company whose shares he would like to buy, if he is bullish on the steel sector.

In practice, P/E ratios too would change over time, in line with the market sentiment, industry prospects, competitive position, management quality etc. In the above case, let us say, the analyst believes that Tata Steel's P/E ratio, based on the overall market condition and the P/E ratio of other steel companies is 10 times. In that case, he would set a target price as follows:

Target Price = Projected EPS X Projected P/E Ratio

i.e. Rs 80 X 10

i.e. Rs 800.

On this basis, he would suggest a "buy", at the current market price of Rs 480. He would estimate the upside potential to be (Rs 800 - Rs 480) ÷ Rs 480 i.e. 67%.

- Margin of Safety

Projecting EPS as well as P/E ratios is a subjective exercise. Other approaches to determine the *intrinsic value* of a share, too, have their share of subjectivity.

Therefore, legendary investors like Benjamin Graham and Warren Buffett rely heavily on *margin of safety.*

Margin of safety can be calculated as 1 – (Market Price ÷ Intrinsic Value). In the above case, (Market Price ÷ Intrinsic Value) is Rs 480 ÷ Rs 800 i.e. 60%.

Margin of safety would be (1 – 60%) i.e. 40%.

The implication is that the estimate of intrinsic value can be wrong by 40%, and still the investor will not lose money. Rs 800 less 40% is Rs 480, the current market price.

Margin of Safety is thus the margin available for the analyst to go wrong. Higher the margin of safety, safer would be the investment.

- Price to Book Value Ratio

Book Value of any company's share can be calculated as its Net Worth ÷ Number of shares. The net worth is nothing but the company's share capital plus reserves less accumulated losses.

Suppose the net worth of Bank of Baroda is Rs 20,000crore, and it has issued 40crore equity shares. The book value of Bank of Baroda's equity shares can be calculated as Rs 20,000crore ÷ 40crore i.e. Rs 500.
If the equity shares are trading in the market at Rs 900, the Price to Book Value ratio can be calculated to be Rs 900 ÷ Rs 500 i.e. 1.8 times.

As with Price / Earnings Ratio, Price to Book Value ratio of a company's equity shares is compared with that of other companies in the same sector, to decide on the share to buy / hold / sell. A high price to book value ratio might be an indication that the company's shares are over-valued. Based on this, an analyst may suggest that the shares be sold.

### 4.1.4. Ratios in Perspective

Three generic ratios were discussed above. Analysts devise sector-specific ratios too. For instance, Average Revenue per User (ARPU) is associated with telecom stocks. Retail stocks are compared on their Revenue per Stock Keeping Unit (SKU).

Investment decisions cannot be taken based on ratios blindly. A high P/E ratio could be either because the company has excellent prospects (suggesting that the shares be bought) or the company's shares are over-valued (suggesting that the shares be sold). The expertise of an analyst is required for taking such judgement calls.

Fundamental analysts typically focus on one or a few sectors. The research division in a large broking house would, therefore, have several fundamental analysts, each focusing on a few sectors. They keep meeting companies' management and track other developments in the sector, to fine-tune their earnings estimates and P/E projections.

## 4.2. Technical Analysis

### 4.2.1. Introduction

Technical Analysis is a study of past price behaviour of the markets and individual stocks, to predict their future direction. The following are key assumptions underlying technical analysis.

- Market price of a stock depends only on its supply and demand. The various factors driving the stock price are captured in the supply and demand.
- Stock prices and markets in general follow a trend that persists for a reasonable period of time.
- The market gives enough indication of changes in the trend, to guide the technical analyst in investment decisions.

A technical analyst bases investment decisions on share prices and trading volumes, which are believed to capture and predict human behaviour. The belief is that the entire market knows more about any stock than an individual analyst. This knowledge of the entire market is captured in the price and volumes in the market. Since technical analysts use charts to read the market, they are also called *chartists.*

### 4.2.2. Tools

According to Charles Dow, the American journalist who co-founded Dow Jones & Company and The Wall Street Journal, stock price movements are governed by three cyclical trends:

- Primary trend, which is the longer range cycle
- Secondary trend, which is the medium range cycle, lasting a few weeks to a few months. This movement may be in a direction opposite to the primary trend.
- Minor trend is the day to day fluctuations, which are believed to have low analytic and predictive value.

The high in a price trend is called a *peak;* the low in the trend is called a *trough.* In a bullish market, each successive peak in the share price would be higher than the previous peak. Similarly, each successive trough would be higher than the previous trough. The position is reversed in a bearish market i.e. each successive peak and trough is lower than the previous peak and trough.

Besides the price, **Dow Theory** also considers the volume. In a bullish market, as the price increases, the volume too increases; but when price decreases, volumes are low. Once again, in a bearish market the position is reverse i.e. when price increases, the volume decreases; but when price decreases, volumes are high.

During a market bottom, volumes go up; volumes decline before a major decline in price.

As a stock price declines, it is likely to stabilise at its support level, where demand for the stock increases. When the stock price goes up, it should be sold closer to its resistance level, where supply of the stock increases.

Technical analysts rely heavily on **Moving Average** of the stock prices to interpret the price trends. In a 5-day moving average, the Day 5 value would be the average of the stock prices for the 5 days from Day 1 to Day 5; Day 6 value would be the average of the stock prices for the 5 days from Day 2 to Day 6. Thus, every day, the oldest data is dropped, and the latest data is added for the average.

Moving averages for short periods, such as 5 days or 7 days, help in understanding the short term trend. 200-day moving average of the stock price helps in reading the long term trend.

The Japanese have an approach to technical analysis, called **Candle Stick**. Here, the opening and closing price for every trading period is shown in the form of a box. Upward movement of price is shown as a white box, while a black box denotes that the closing price was lower than the opening. The high and low during the trading period are denoted by a vertical line.

The pattern formed by these boxes and lines is studied to gauge the likely direction of the stock.

R N Elliott believed in the **Elliott Wave Theory** that stock market moves in waves that follow the Fibonacci series (1, 2, 3, 5, 8, 13, 21, 34 …). Every number in the series is the summation of the previous two numbers. Thus, 1 + 2 = 3; 2 + 3 = 5; 3 + 5 = 8 and so on.

According to the Elliott Wave Theory, the market moves in five distinct waves on the upside, and three distinct waves on the downside. Elliott gave different names to different wave trajectories.

Lay investors, at times, get enamoured with technical analysis, because it does not call for reading of voluminous financial information. They learn a few technical tools from books, websites or short-term training programs, apply it on share price information that is readily available in websites, and trade on that basis.

In reality, technical analysis is an art that calls for experience. Until one has acquired deep knowledge and the requisite experience, it would be better to take a second opinion from an expert, or limit the exposure that one takes.

### 4.2.3. Fundamental v/s Technical Analysis

Both streams of analysts are strongly committed to their approach to stock analysis. Fundamental analysts often decry the technical analysts, who do not seem to consider the business, earnings or management of the companies to invest in.

Technical analysts, on the other hand, are happy about the frequency of data they work with – on any trading day there is a continuous stream of price and volume data. Fundamental analysts receive earnings information every quarter; companies may also share some sales information every month.

It is generally accepted that fundamental analysis aids decisions on buy / sell / hold. Once the decision is taken, timing of the implementation can be guided by technical analysis.

Day trading and other shorter term investment approaches depend on technical calls.

## 4.3. Quantitative Analysis

The analysis of stocks discussed so far did involve an element of quantitative analysis. However, the term “quantitative analysis” is used to describe the newer approaches to investment, described below.

Investment practitioners are always looking for newer investment frameworks that will help them earn better returns at a lower risk. This quest has led mathematically oriented analysts to apply advanced mathematics and statistics, using computer software on market data. High-end computers and software are used to quickly simulate different economic and

market scenario, and the likely stock prices in those scenarios or differences in value between pairs of securities. Probability distributions are becoming an important driver of investment decisions. Based on such analyses, optimal investment portfolios are constructed. Algorithms based on such analyses are used for trading - an approach that is called ***algo trading***.

Derivatives have thrown open an entirely new gamut of investment avenues. Arbitrage between the derivatives and the underlying cash market; and also between the same instruments in different exchanges has become automated.
Black Monday (October 19, 1987), when the Dow Jones index fell by 22%, was attributed to automated trading. Such trading has led to some extreme moves in the stock market in the last few years. A new term has been coined for this – ***flash trading***.

Algo, automated, flash – all boil down to the same approach of quick trading driven by computer-based investment models that use advanced mathematics and statistics. The professionals who work on such investment models are generally employed in hedge funds. Blind faith in such models can be dangerous. These models tend to ignore the role of *black swan events*, discussed in Chapter 9.

## 4.4. Debt Investment Management

### 4.4.1. Role of Debt

While equity is viewed as a *growth asset*, debt is more of an *income asset.* The predominant return one normally expects out of debt is interest, although debt also yields capital gains, as will be discussed in this Chapter.

Debt performs the role of a defensive asset in the portfolio. As highlighted in the MFD Workbook, a mix of debt and equity in the portfolio – asset allocation – is a prudent approach to investment management.

### 4.4.2. Interest & Yield

The interest that an issuer promises to pay on a debt instrument is also called *coupon*. It may be a *fixed rate*, or a *floating rate* i.e. linked to some other interest rate in the market, such as the interest on Public Provident Fund.

Floating rate interest is defined in terms of its base and spread. PPF + 2% would signify that interest payable on the instrument would be 2% over the PPF Rate. If PPF Rate is 8%, an investor in the instrument is entitled to interest at the rate of 8% + 2% i.e. 10%. The PPF Rate, here, is the *base* (which will fluctuate from time to time) and 2% is the *spread* (which will remain constant during the tenor of the instrument).

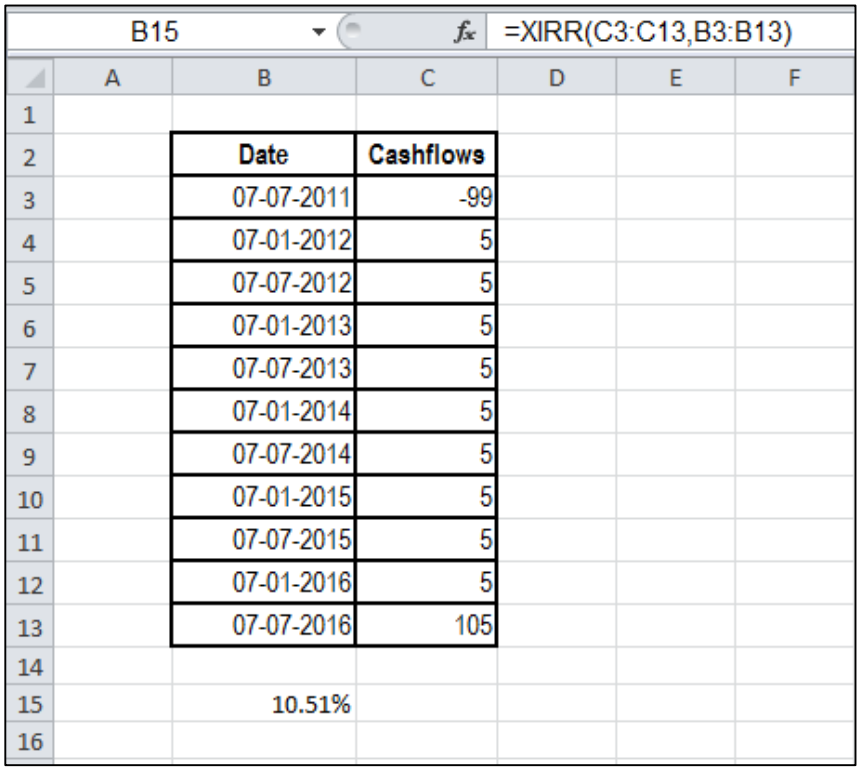
An investor is better off, if the same annual coupon rate is paid more frequently during the year. The interest that is received during the year can be re-invested to earn additional income. Therefore, for the same coupon of 10% p.a., an investor is better off with half-yearly interest payments (i.e. 5% every half-year) as compared to annual interest payment

(i.e. 10% for the whole year). Similarly, quarterly interest of 2.5% would be better than half-yearly interest of 5%.

Different instruments offering interest at various frequencies can be easily compared through their *annualised yield.* It is calculated as (1 + coupon per period) $^{\text{Number of periods}}$ – 1, as shown in the following table.

| Coupon | Formula | Annualised Yield |
|---|---|---|
| 10% p.a., annual rest | $(1+10.00\%)^1 - 1$ | 10.00% |
| 10% p.a., semi-annual rest | $(1+5.00\%)^2 - 1$ | 10.25% |
| 10% p.a., quarterly rest | $(1+2.50\%)^4 - 1$ | 10.38% |

Annualised yield can be easily calculated from the coupon, based on its frequency. The




return earned by a debt investor, as already seen, is interest + capital gains. If an investor buys the debt security offering coupon of 10% p.a. payable semi-annually at Rs99, when its maturity value is Rs 100, then a capital gain of Re 1 is expected. The annualised yield of 10.25%, mentioned in the above table, does not capture this element of return arising on account of capital gain.

Total return until maturity of the debt security (including interest and capital gain / loss) is called *yield to maturity (YTM).* It can be easily calculated with MS Excel, by listing the cash flows and their respective dates, and using the XIRR function.

For the cash flows from an investor's perspective, the original investment can be shown as a negative value, while interest and maturity receipts can be shown as positive values, as detailed in the table above.

The annualised yield of 10.25% together with the capital gain of Rs1 has contributed to the YTM to 10.51%.

### 4.4.3. Risks in Debt

- Interest Risk / Price Risk

This is the primary risk in debt investment. An investor in a debenture that yields a fixed interest finds that it loses value in the market, if overall interest rates in the market were to go up subsequently. However, if overall interest rates in the market were to go down, then the investor is in the happy position of seeing the value of the fixed interest rate debenture gain in value.

Such increases and decreases in value of fixed interest rate debt securities, in line with decreases and increases in overall interest rates in the market (although the coupon and maturity value of the fixed interest rate security does not change) are a source of capital gains and capital losses in debt investment.

Broadly, it can be said that the extent of fluctuation in value of the fixed rate debt security is a function of its *time to maturity* (*balance tenor*). Longer the balance tenor, higher would be the fluctuation in value of the fixed rate debt security arising out of the same change in interest rates in the market.

This has led to the concept of *weighted average maturity* in debt schemes. If a scheme has 70% of its portfolio in a 4-year security, and balance 30% in a 1-year security, the weighted average maturity can be calculated to be (70% X 4 years) + (30% X 1 year) i.e. 3.1 years. The NAV of such a scheme can be expected to fluctuate more than another debt scheme with a weighted average maturity closer to 1.5 years.

A more scientific measure of sensitivity of a fixed rate debt instrument to interest rates is its *modified duration*. This can be easily calculated using the MDURATION function in MS Excel.

Suppose State Bank of India issues a 5-year debenture, with an interest rate of 8% p.a., payable half-yearly. What is its modified duration?

The parameters that MS Excel needs for the calculations are as follows:

- *Settlement Date* i.e. the date the security is purchased, say, 07-07-2011
- *Maturity Date* i.e. 5 years later, 07-07-2016
- *Coupon*, which is 8%
- *Yield*, which can be calculated as $(1+4\%)^2 - 1$ i.e. 8.16%
- *Frequency of the Coupon* (number of payments in a year), which is 2. It would be 1 for annual payments, 4 for quarterly payments etc.

- The syntax for the function is "=mduration(settlement date, maturity date, coupon, yield, frequency)".

On entering this function, the modified duration would be calculated to be 4.05.
This means that if yields in the market for similar debt securities were to change by 1%, the value of this SBI Debenture in the market would change by 4.05%.

If yields in the market were to increase by 0.25%, the SBI debenture will lose value to the extent of 4.05 X 0.25% i.e. 1.01%. Thus, the debentures that earlier traded at Rs100, would now trade at Rs98.99. Such fluctuations are a feature of any fixed rate debenture. The interest in a floating rate debenture keeps getting re-set in line with changes in yield in the market. Therefore, the fluctuations in value are minimised in such securities.

- Credit Risk

An investor in a security issued by the government (Sovereign security) draws comfort that the government will not default. Therefore, sovereign securities are said to be free of credit risk. This feature ensures that yields in the market are typically lowest for sovereign securities.
The yield available in the market for different tenors of government securities is captured in the *Sovereign Yield Curve*.

Since every non-sovereign security entails a credit risk, the yield needs to be a higher than the sovereign yield for the same maturity. This difference between sovereign yield and non-sovereign yield is also called *spread*.

Better the credit rating of an issuer, lower would be the spread. Issuers with a poor credit rating need to offer higher yields to attract investors. Therefore, the spread on such securities would be higher.

Credit rating too changes over time. A security that was rated 'AAA', can get downgraded to say, 'AA'. In that case, the yield expectations from the security would go up, leading to a decline in its value in the market. Thus, a shrewd investor who anticipates an improvement in credit rating on an instrument can benefit from the increase in its value that would follow.

- Re-investment Risk

The XIRR function used for the yield calculations earlier, presumes that the investor would be able to re-invest all the cash flows received during the tenor of the security, at the same XIRR yield.

In reality when the investor receives interest, he may find that interest rates in the market have gone down. This would bring down the re-investment rate, and therefore the overall return of the investor. If the interest rates were to go up, the investor would obviously

benefit in terms of re-investment rate on the interest received (although the debt security itself will lose value).

Some securities are issued on cumulative basis. A cumulative debenture of 8% coupon p.a. payable half-yearly means that the interest will be calculated for every interest period (i.e. every six months), but it would not be paid to the investor at the end of such interest period; it will be added to the principal, on which interest for the next period would be calculated. Thus, the base on which the 8% coupon is calculated keeps going up until maturity. Since the investor does not receive any interest to re-invest during the tenor of the security, there is no re-investment risk. This risk is taken up by the issuer of the cumulative debenture.

A slightly different structure to avoid re-investment risk is a *zero coupon debenture*. Here, the issuer does not announce a coupon. However, the debenture is issued at a discount to its face value.

Suppose, a debenture of face value Rs100 is issued at Rs80. The investor will invest Rs80, but receive Rs100 on maturity. The difference of Rs20 is effectively interest income for the investor. YTM can be calculated using the XIRR function, as shown earlier.

- Foreign Currency Risk

Investments that are denominated in foreign currency entail this risk. As with equity (explained in Chapter 1), the investor benefits if the currency in which the investment is denominated, becomes stronger.

## 4.5. Issues for a Debt Fund Manager

Why would an investor invest in a longer tenor debt security, if it entails the risk of a higher loss, if interest rates were to go up?

- One answer is logical. The expectation is that interest rates would go down. A longer tenor debt security would appreciate more, if the interest rate expectation comes true. Interest rates are a consequence of complex factors. In India, the challenge of interest rate forecasts is greater because the reliability of some of the macro-economic numbers is not so high. Therefore, debt fund managers need an excellent grip on the economy.
- The sovereign yield curve is upward sloping. This means that the inherent interest yield in the debt security would go up with the tenor. A 5-year debt security would offer a higher yield than a 1-year debt security of the same issuer.

The debt fund manager, thus, will have to balance the desire to earn a higher interest-based yield, with the prospect of the portfolio suffering a higher capital loss. Similarly, it is the job of the manager to balance the other risks, to earn a reasonable return for the investors.

## 4.6. Derivatives

The investment-related discussions so far focused on what is called the *cash market* i.e. the equity or debt securities directly. It is also possible to have the same exposure through an indirect route.

Suppose, Party A enters into a contract to buy from Party B, 3 months from today, 10 litres of petrol at a price that is decided today. Party A will benefit if the price of petrol goes up – it is said to have a *long position* in petrol. If the price of petrol goes down, Party B benefits; conversely, it will need to bear a loss if the petrol prices were to move up. Party B therefore has a *short position* in petrol.

Since the profits or losses on the contract depend on petrol prices, the contract is a *derivative* with petrol being the *underlying.* Derivative contracts are constructed with various underlying such as equity shares, equity indices, debt securities / interest rate, debt indices, gold, other commodities, rainfall etc.

For the same underlying, derivative contracts can be structured in various ways, depending on the type of position envisaged. Forwards, Futures, Options and Swaps are the commonly traded contract formats.

### 4.6.1. Forwards

The petrol contract mentioned above is in the nature of a *forward*. The features of a forward are:

- There is an underlying viz. petrol
- Both parties to the contract are committed.
- One party's gain is the other party's loss. It is a zero-sum game. Such contracts are said to be *symmetric*.
- Various pairs of parties may enter into alternate contract structures for the same underlying. For example, 4 months instead of 3 months or 7 litres instead of 3 litres or the contracts may be for different grades of petrol. Such contracts are not *standardised.*
- The contracts are not traded in an exchange. Therefore, there is no transparency on the prevailing price in the market for such a contract.
- If either party wants to get out of the position, it can only do so with the concurrence of the other party. It cannot, for instance, sell its position to some third party, unless the first counter-party agrees to the arrangement.
- Each party will have to evaluate the counter-party risk that is inherent to the contract. If a party is unable or unwilling to fulfil its obligation, the other party loses.
- There is no formal risk management framework to protect the parties from the counter-party risk.

### 4.6.2. Futures

Futures are an alternate format of taking positions on the same underlying. The similarities between forwards and futures are:

- There is an underlying viz. petrol
- Both parties to the contract are committed.
- The contract structure is *symmetric*.

Futures, however, address some weaknesses of forwards:

- The contracts are traded in a stock exchange.
- In order to enable trading with adequate liquidity, the contracts are standardised. For instance, in India, futures on equity shares are commonly traded for 1-month (*near month*), 2-month (*next month*) and 3-month (*far month*) duration. Even the date when each contract would mature is standardised viz. the last Thursday of every month.
- The trading ensures transparency. At any stage, anyone can check the prevailing market price for such a contract.
- A party that wants to exit its position can sell the contract at any time to any buyer, who is available in the market.
- Although two independent parties do the trade in the Stock Exchange, the clearing corporation associated with the exchange introduces itself into the contract, between the two parties, through a legal process called *novation*. Therefore, for both the parties, the counter-party is the clearing corporation, which will fulfil the obligation to the other party, even if one of the parties defaults. On account of this feature, the parties do not need to go through the process of assessing the counter-party risk for each transaction.
- In order to protect itself, the clearing corporation imposes margin requirements on the parties. The margins are set at a level where it fully covers the loss suffered by any party. This loss is assessed continuously, and depending on needs, more margins can be collected. A robust risk management framework ensures that the positions taken by parties are covered by margins, and safety of the market is ensured.

Let us take the example of the SBI Futures Contracts that are available for trading in the National Stock Exchange (NSE) [It is also available in other exchanges. As an illustration, the NSE Contract is discussed]:

- The clearing corporation associated with NSE is National Securities Clearing Corporation Limited.
- NSE has set the market lot at 3,000 for SBI Futures. Thus, each contract would represent 3,000underlying shares.
- If the futures is traded at Rs 250, then each contract leads to an exposure of Rs 250 X 3,000 i.e. Rs 750,000.
- The investor, however, pays only a part of this amount, initially. If the margin is 15%, the initial margin would amount to Rs 750,000 X 15% i.e. Rs 112,500.

- After the initial margin, the investor keeps receiving (if the underlying i.e., SBI share moves in his favour) or paying (if the underlying moves against him) a variable margin, every day.
- If on settlement, the market price of the underlying SBI share is Rs 300, an investor would have earned a profit of Rs 300 - Rs 250 i.e. Rs 50 per share. This translates into a gain of Rs 50 X 3,000i.e. Rs 150,000 on the contract for someone who has gone long i.e. bought the contract.
- The investor does not need to hold the contract until settlement date. It can be sold any time before the settlement date. Depending on how the prices have moved, an investor who has gone long will gain or lose money.

Futures that have a share as the underlying are called *stock futures;* when the underlying is an index, it is an *index future;* commodities are the underlying for *commodity futures;* futures that are constructed on debt securities are called *interest rate futures;* futures on foreign currency are called *currency futures.* All these are available for investment in India.

### 4.6.3. Options

In the petrol contract discussed earlier, both the parties were committed. Party A was committed to buy, just as Party B was committed to sell. Such a structure made it a symmetric contract. If petrol prices went up, Party A would gain, but Party B would lose, and vice versa. It was a zero-sum game.

The contract structure can be modified to make Party B committed, but not Party A i.e. Party A can have the right (but not the obligation) to buy 10 litres of petrol from Party B at a price which is decided today. If Party A chooses to exercise this right, Party B is obliged to sell 10 litres of petrol at the agreed price. Such a contract is called an *option.*

- Since the contract is to BUY petrol, it is a *call option*.
- Since Party A has the right, but not the obligation, it has "*bought the call option*"
- Party B is obliged to sell the underlying, if Party A exercises its right. Party B has "*sold the call option*" (or "*written the call option*").
- If petrol prices were to go up, Party A will exercise the option and book a profit (the corresponding loss would be to the account of Party B). If petrol prices do not go up, Party A will not exercise the option i.e. it will let the option lapse.
  Thus, Party B will not benefit from any decline in the prices, although it will suffer from any appreciation in the prices. Therefore, the contract is said to be *asymmetric.*
- For entering into such an asymmetric contract Party A will pay an option premium to Party B which is taking the risks under the contract. This option premium is an income for Party B (expense for Party A), irrespective of whether or not Party A exercises its option.

An option contract can also confer a right to sell something. Suppose Party C acquires the right to sell 10 litres of diesel to Party D at a price agreed upon today.

- Since it is a right to SELL diesel, it is a *put option.*

- The right, but not the obligation, is with Party C. Therefore, it has "*bought the put option*".
- Party D, which is obliged, has "*sold the put option*" (or *"written the put option").*
- Party C will pay Party D an option premium for entering into the asymmetric contract.
- Since it is a right to sell, Party C will benefit if diesel prices were to fall. But if diesel prices increase, Party C will let the option lapse.
- If Party C exercises its option (which would happen if diesel prices decline), Party D will suffer a loss. But the option premium would be its income.

*American Options* can be exercised anytime upto maturity of the contract; *European Options* can be exercised only on the date of expiry of the contract.
Options have some similarities with futures:

- They are traded in a stock exchange. This ensures transparency of prices.
- They are available for stocks and indices, with reasonable liquidity, for 1-month (*near month*), 2-month (*next month*) and 3-month (*far month*) duration, and settled on the last Thursday of each month.
- The clearing corporation becomes the counter-party for all contracts through the process of novation.
- The clearing corporation implements a risk management system, including margins. However, since only the seller of the option can incur a loss, only he pays a margin. (the buyer of the option will pay the premium).

As with futures, options can be constructed on stocks (*stock options*), indices (*index options*), commodities (*commodity options*) or debt securities (*interest rate options*) or foreign currency (*currency options*.*)* In India, we currently have index options, stock options and currency (USD) options.

### 4.6.4. Swaps

Suppose a bank has borrowed money at a fixed rate of interest (say, 7%). It now expects interest rates to go down. Based on this view, switching to a floating rate of interest is advisable. But the lender may not agree to the switch.

The bank would then look around in the market, for some other party that has a contrary view on interest rates. If the other party (say, Party Y), expects interest rates to go up, it would be happy to get into an arrangement where it would pay a fixed rate of interest (say, 7%), in return for a floating rate of interest (say, 5-year Government Security yield +1%). Let us assume that the yield is 6% initially.

The bank and Party Y would then enter into a swap agreement. The terms would include a notional principal (say Rs 1crore), which does not get exchanged in an interest rate swap, but is used as the basis for calculating the interest payments.

- If on the first interest payment date, the Government Security Yield has gone up from 6% to 6.5%, the bank is expected to pay Party Y 6.5% + 1% i.e. 7.5% of

Rs1crore. In return, it is expected to receive 7% of Rs1crore. Thus, the bank would incur a net cost of 0.5% of Rs1crore i.e. Rs 50,000 on account of the swap.

- If on the next interest payment date, the Government Security Yield has gone down to 5%, the bank has to pay floating interest of 5% + 1% i.e. 6% of Rs1crore. In return, it is expected to receive 7% of Rs1crore. Thus, the bank would gain 1% of Rs1crore i.e. Rs 100,000 on account of the swap.

It is clear from the example that when the expected interest view (decline in interest rate) does not materialise, the bank loses money. But when its interest view is validated, it gains. For simplicity, the example presumes that the interest arrangement is annual. Normally, it is semi-annual.

The above was an example of an interest rate swap between fixed and floating interest rates. Similarly, swaps can be constructed between two different kinds of floating interest rates. For example, the swap could be between Government Security Yield and Mumbai Inter-Bank Offered Rate (MIBOR). If foreign currency is involved, the swap can go beyond interest to cover the principal also.

Like futures and options, swaps too can be traded. But swap trading is not so prevalent in India. Bank treasuries do intermediate in the swap market and earn the spread between different parties to swap contracts.

## 4.7. Application of Derivatives

The SBI Futures example showed how it is possible to take a position worth Rs 750,000 by investing a mere Rs 112,500. This amounts to a leverage of Rs 750,000 ÷ Rs 112,500 i.e. 6.7 times. This means that a person who has Rs 750,000 to invest can -

- Take a position of Rs 750,000 in the cash market.
- Take a position of Rs 750,000 X 6.7 i.e. Rs 50,25,000 in the futures market.

Such leveraging is found attractive by investors. They need to however consider the fact that besides the initial margin, they may also have to pay daily margins, if the market prices turn adverse to their position.

Leveraging is a risky approach to investment. Derivatives can also be used as a prudent risk management tool, as illustrated below.

### 4.7.1. Equity Market

- Purchase of a Put Option

Suppose a fund manager is apprehensive that the market would go down. He does not need to sell the investment portfolio. Instead, he can pay the option premium and buy a put option on the stocks held or on the index.

- If the market does go down, the investment portfolio will lose value. However, the put option will appreciate in value, thus offering protection to the scheme's Net Asset Value.
- If the market goes up, the investment portfolio will appreciate. The option premium expense would drag down the NAV to an extent. But that is the cost of protection.

- Selling a Stock Future

Suppose a fund manager wants to protect the NAV during a temporary period of weakness in the market. He only needs to sell a stock future (for protecting a stock that is in the portfolio) or an index future (for protecting the overall portfolio). When the market turns weak, the investment (share) portfolio will lose value. However, the fund manager can cover the earlier sold stock future, by buying it at a lower price, i.e., the futures position can be squared to book a profit. This profit can make up for any loss in the investment (share) portfolio.

- Arbitrage

Suppose a stock is trading at Rs 2,463, while futures on the same stock, with time to maturity of 8 days, are trading at Rs 2,467. The fund manager can buy the stock and sell futures on the same stock. Since the positions neutralise each other, the fund manager earns a riskless profit of (Rs 2,467 - Rs 2,463) ÷ Rs 2,463 X (365 ÷ 8) i.e. 7.41%.

On maturity, both the positions would be reversed. The real profit for the scheme would need to include the interest cost on margin payments, profit / loss booked on the reversal transactions, and the transaction costs related to the original pair of transactions and the reversal transactions.

Portfolios of arbitrage schemes are constructed in such a manner to earn riskless profits.

### 4.7.2. Debt Market

It is possible for debt fund managers to manage their debt exposures through interest rate futures, as illustrated below:

- Selling an Interest Rate Future to Protect Portfolio

When interest rates in the economy go up, debt securities that yield a fixed coupon depreciate in value. This will bring down the NAV of the scheme.

A debt portfolio manager can sell an interest rate future, in anticipation of increase in interest rates. When interest rates do go up, the interest rate futures will lose value. At that stage, the futures position can be reversed at a profit. This will cushion the decline in NAV on account of decrease in the value of the portfolio.

- Calendar Spread Trading

The yields in the market vary depending on the nature of the issuer and when the security is due to mature. Debt portfolio managers monitor the yields constantly. At times, they can

identify mis-pricing of securities i.e. yield for some maturity is unusually high, while the yield for some other maturity is unusually low.

In situations of mis-pricing, debt portfolio managers do calendar spread trading i.e. they go long on a security for one maturity, and go short on a security of the same issuer for another maturity. Since both securities are from the same issuer, the credit risk is neutralised, while a spread is earned. It is a form of arbitrage trading to earn riskless profits.

Technically, doing the calendar spread trade through interest rate futures is superior to trading with the underlying securities themselves. Thus, the fund manager can buy an interest rate future for one maturity, and sell another interest rate future for a different maturity, to lock in a spread profit.

- Arbitrage

Instead of trading on the calendar spread between two futures contract, the fund manager can also arbitrage between the cash market and the futures market, to earn a riskless profit. This is called *cash and futures arbitrage.*

- Duration Targeting

At times, the fund manager would like to change the duration of the investment portfolio. This can be achieved by trading the underlying securities. An alternate would be to buy and sell the interest rate futures of different maturities to achieve the target duration. Calculators are available for determining the value of futures to trade to achieve the target duration.

### 4.7.3. Foreign Currency

In India, currency futures are available against the rupee for USD (US Dollar), Euro, GBP (British Pound) and JPY (Japanese Yen).

Suppose the fund manager is positive about US equities, but negative about the USD currency.

Pure investment in US equities would expose the portfolio to the USD risk too. As seen in Chapter 1, the US equity portfolio might appreciate; but when it is translated into rupees, it might depreciate on account of a weak USD.

The fund manager can protect the portfolio from such a risk, by selling USD futures. When the USD weakens, the fund manager can square off the USD futures at a profit. This will make up the loss in the investment portfolio on account of USD weakness.

Thus, futures can be used to immunise international portfolios from foreign currency risk.

## Exercise

**Multiple Choice Questions**

1. Which of the following does a fundamental analyst study?
   a. Company's financials
   b. Company's management
   c. Competitive position in industry
   d. All the above

2. The fundamental analyst has estimated the theoretical price of a stock to be Rs 20. It is now trading at Rs 12. What is the margin of safety?
   a. 60%
   b. 40%
   c. 75%
   d. None of the above

3. A technical analyst studies _____.
   a. Share price trends
   b. Share trading volumes
   c. Both the above
   d. Human behaviour

4. Which of the following is / are example/s of computer-based trading?
   a. Algo Trading
   b. Flash Trading
   c. Automated Trading
   d. All the above

**Answers**

1 – d, 2 – b, 3 – c, 4-d

# 5. Valuation of Schemes

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Valuation of equity, debt, derivatives in mutual fund schemes
- Non-Performing Assets (NPA) and Provisioning for NPAs

The valuation of individual securities determines the total portfolio valuation, which is a key factor driving the NAV of any scheme.

The AMC has to constitute an in-house Valuation Committee, which would include employees from accounts, fund management and compliance departments. The committee is expected to regularly review the systems and practices of valuation of securities. Similar securities in various schemes of the AMC are to be valued consistently.

In case securities purchased by a mutual fund do not fall within the current framework of the valuation of securities, then the mutual fund has to report immediately to AMFI regarding the same. Further, at the time of investment, the AMC is expected to ensure that the total exposure in such securities does not exceed 5% of the total AUM of the scheme. AMFI is to ensure that valuation agencies cover such securities in their valuation framework within 6 weeks. Until then, the securities may be valued as per the AMC's proprietary valuation model.

## 5.1. Equities

If it is traded in a stock exchange on the date of valuation, the closing valuation in the stock exchange is to be used. Preference should be for the stock exchange where the security is principally traded. All the securities can be valued on the basis of prices quoted in a stock exchange where majority in value of the investments are principally traded.

Once an exchange is selected for the valuation of a security, this has to be consistently followed. In the event of any change, reasons need to be recorded in writing.

If a security is not traded on the date of valuation, the value of the security on any exchange on the latest previous day may be used, so long as it is within 30 days prior to the valuation date.

It is treated as non-traded, if it is not traded in any stock exchange for 30 days prior to the valuation date.

Equity shares and equity related securities (convertible debentures, equity warrants, etc.)are considered to be thinly traded, if trading in a month (all recognised stock exchanges in India together) is less than Rs 5lakh, and volume traded is less than 50,000 shares.

**Non-traded and thinly-traded equities are to be valued as follows:**

- Calculate the net-worth per share

Net Worth per share =
[Share Capital + Reserves (excluding Revaluation Reserves) – Miscellaneous expenditure and Debit Balance in Profit and Loss Account] ÷
Number of Paid up Shares
Suppose the Net Worth per share is Rs 30.

- Calculate the industry's Price / Earnings Ratio, based on latest BSE / NSE data and latest audited EPS of the company. Reduce this by 75% i.e. only 25% should be considered.

Suppose it is 40 less 75% i.e. 10 times

- Determine the EPS of the company based on latest audited accounts. If it is negative, it is to be taken as zero.

Suppose the EPS is Rs 5

- Capital Earning Value of the share will be taken as Industry P/E (25%, as explained above) X Company's EPS

Based on the above assumptions, Capital Earning value would be 10 X Rs 5 i.e. Rs 50

- The average of the Book Value of the company's share and its Capital Earning Value is to be reduced by 10% for illiquidity. This will be the fair value of the share, to be used for portfolio valuation.

For the numbers given earlier, it would be calculated as:
[(Rs 30 + Rs 50) ÷ 2] less 10%
i.e. Rs 40 less 10%
i.e. Rs 36

- If the latest Balance Sheet of the company is not available within nine months from the close of the year, unless the accounting year is changed, the shares of the company are to be valued at zero.

**Valuation of unlisted equities is similar to valuation of thinly-traded and non-traded equities, except for the following differences:**

- The net-worth per share is to be calculated on two bases
    - The first basis is the same as discussed earlier.
    - In the second basis, adjustment is to be made for outstanding warrants and options. The amount receivable against the outstanding warrants and options is added to the numerator, while the number of new shares that would be issued is added to the denominator. On this basis, the net worth is re-calculated.

The lower of the two bases would be considered as the net worth for further calculation.

- The adjustment for illiquidity would be 15%, (instead of 10% in the case of thinly-traded and non-traded equities).

If on the above basis, an individual security that is unlisted or not-traded or thinly traded accounts for more than 5% of the net assets of a scheme, then an independent valuer has to be appointed for its valuation.

Aggregate value of "illiquid securities" under a scheme (i.e., non-traded, thinly traded and unlisted equity shares), cannot exceed 15 per cent of the total assets of the scheme. Any illiquid securities held above 15 per cent of the total assets need to be assigned zero value.

Valuation of convertible debentures is done separately for the convertible and non-convertible portions – the former is valued like equity; the latter is valued like debt. A discount factor can be applied on the equity, because of non-tradability of the instrument until conversion.

Warrants to subscribe for shares attached to instruments are be valued at the value of the share which would be obtained on exercise of the warrant, as reduced by the amount which would be payable on exercise of the warrant. Here again a discount for illiquidity can be applied until the warrant is exercised.

Until rights shares get traded, they are valued as per the following formula:

$V_R = n/m \times (P_{XR} – P_{OF})$

Where

$V_R$ = Value of rights

n / m = No. of rights shares entitled

[n = No. of shares held; m = No. of shares that would yield 1 rights share]

$P_{XR}$ = Ex-rights price

$P_{OF}$ = Rights Offer Price

Suppose, the scheme holds 150 equity shares. The Ex-Rights price is Rs 25, and the rights offer is 1:3 at Rs 15.

The rights will be priced at (150 ÷ 3) X (Rs 25 - Rs 15) i.e. Rs 500.

Where it is decided not to subscribe for the rights but to renounce them and renunciations are being traded, the rights can be valued at the renunciation value.

## 5.2. Debt

Money market and debt securities, including floating rate securities have to be valued at the valuation given by agencies entrusted for this purpose by AMFI. They are valued on amortisation basis if the residual maturity is upto 60 days.

## 5.3. Non-Performing Assets (NPA)and Provisioning for NPAs

Assets that have lost their value, wholly or partly, need to be written down in the accounts of the scheme. This ensures that the NAV provides a realistic assessment of the worth of each unit of the scheme.

SEBI has framed detailed regulations on recognition of assets as non-performing, and provision for those losses in the accounts of the scheme.

### 5.3.1. NPA Recognition

If the interest and/or principal amount is not received or remains outstanding for one quarter from the day such income and/or instalment was due, then the asset is to be recognised as NPA. The definition is to be applied one quarter after the due date of interest. Further, interest accrual will stop after the expiry of one quarter from the due date of the defaulted interest.

For example, if an interest was due on June 30, 2011, and remains outstanding, the asset will be classified as NPA on October 1, 2011. Interest income will be accrued upto September 30, 2011. Thereafter, the scheme will stop accruing the interest income.

### 5.3.2. Provision for Losses

In the above case, on October 1, 2011 full provision needs to be made for the interest that was accrued on June 30, 2011 that remains outstanding. On January 1, 2012, full provision would be made for interest that was accrued on September 30, 2011 and remains outstanding.

Apart from the provisioning for interest income that was due and recognised as income in the accounts, the potential loss of principal amount too is to be provided for, even though the amount may not be due. The provisioning schedule has been prescribed as follows:

| **% of book value to write off** | **Prescribed time period** | **In the above example** |
|---|---|---|
| 10% | 6 months after due date of interest | January 1, 2012 |
| 20% | 9 months after due date of interest | April 1, 2012 |
| 20% | 12 months after due date of interest | July 1, 2012 |
| 25% | 15 months after due date of interest | October 1, 2012 |
| 25% | 18 months after due date of interest | January 1, 2013 |

If any instalment is due during the provisioning period, then the provisioning would be as per the above table, or for the entire instalment due, whichever is higher.

In the case of close-ended scheme, the above provisioning is the minimum. The scheme will have to provide for the entire book value of the asset, prior to closure of the scheme.

The provisioning norms are the same for secured and unsecured debt securities.

Deep Discount Bonds are classified as NPAs, if any two of the following conditions are satisfied:

- If the rating of the Bond comes down to Grade 'BB' (or its equivalent) or below.
- If the company is defaulting in their commitments in respect of other assets.
- Net worth is fully eroded.

Provisioning schedule for principal in the case of deep discount bonds is the same as for regular bonds.

If the credit rating falls to D (i.e. default) then the entire book value is to be provided for.

### 5.3.3. Re-classification of Assets and Provision Write-back

NPA will be re-classified as a performing asset as follows:

- When the company clears all the arrears of interest, the interest provisions can be written back in full. Further, the interest that was not accrued earlier can be recognised as income based on receipt.
- The asset will be reclassified as performing on clearance of all interest arrears, and if the debt is regularly serviced over the next two quarters.
- The provision made for the principal amount can be written back as follows:

| % of provision to write back | Prescribed time period |
|---|---|
| 100% | End of 2nd calendar quarter, if only interest was in default |
| | If both principal & interest was in default: |
| 50% | End of 2nd calendar quarter |
| 25% | End of every subsequent quarter |

- It can be reclassified as 'standard asset' only when both, the overdue interest and overdue instalments are paid in full and there is satisfactory performance for a subsequent period of 6 months.

### 5.3.4. Disclosures

- In the half-yearly portfolio statement, NPA is to be disclosed security-wise.
- The total amount of provisions made against the NPAs has to be disclosed in addition to the total quantum of NPAs and their proportion to the assets of the Mutual Fund scheme.
- Where the date of redemption of an investment has lapsed, the amount not redeemed is shown as 'Sundry Debtors' and not investment. However, where an investment is redeemable by instalments, it will be shown as an investment until all instalments have become overdue.

## 5.4. Gold

Gold held by a gold exchange traded fund scheme is valued at the AM fixing price of London Bullion Market Association (LBMA) in US dollars per troy ounce for gold having a fineness of 995.0 parts per thousand. This is subject to the following:

- Adjustment for conversion to metric measure as per standard conversion rates;
- Adjustment for conversion of US dollars into Indian rupees as per the RBI reference rate declared by the Foreign Exchange Dealers Association of India (FEDAI); and
- Addition of-
    - Transportation and other charges that may be normally incurred in bringing such gold from London to the place where it is actually stored on behalf of the mutual fund; and
    - Notional customs duty and other applicable taxes and levies that may be normally incurred to bring the gold from the London to the place where it is actually stored on behalf of the mutual fund;

Where the gold held by a gold exchange traded fund scheme has a greater fineness, the relevant LBMA prices of AM fixing is taken as the reference price.
If the gold acquired by the gold exchange traded fund scheme is not in the form of standard bars, it has to be assayed and converted into standard bars which comply with the good delivery norms of the LBMA and thereafter valued.

## 5.5. Real Estate Mutual Funds

As discussed in Chapter 2, the real estate assets held by a mutual fund are to be valued at cost price on the date of acquisition. This comprises purchase price and any other directly attributable expenditure such as professional fees for legal services, registration expenses and asset transfer taxes.

If the payment for a real estate asset is deferred, its cost would be the cash price equivalent. The scheme has to recognise the difference between this amount and the total payments as interest expense over the period of credit.

On every ninetieth day from the day of its purchase, it has to be valued at its fair value.
'Fair value' means the amount for which an asset could be exchanged between knowledgeable parties in an arm's length transaction and certified by the real estate valuer.

'Knowledgeable' means that both the buyer and the seller are reasonably informed about the nature and characteristics of the real estate asset, its actual and potential uses, and market conditions at the balance sheet date.

'Fair value' specifically excludes an estimated price inflated or deflated by special terms or circumstances such as atypical financing, sale and leaseback arrangement, special considerations or concessions granted by anyone associated with the sale.

Where a portion of the real estate asset is held to earn rentals or for capital appreciation, and if the portions can be sold or leased separately, the real estate mutual fund scheme has to account for the portions separately.

## Exercise

**Multiple Choice Questions**

1. Equity shares and equity related securities (convertible debentures, equity warrants etc.) are considered to be thinly traded, if _____.
   a. trading in a month (all recognised stock exchanges in India together) is less than Rs 5lakh
   b. volume traded is less than 50,000 shares
   c. Both the above
   d. Neither (a) nor (b)

2. Illiquid securities held above 15 per cent of total assets need to be assigned zero value.
   a. True
   b. False

3. Money market and debt securities, including floating rate securities are valued in mutual fund schemes on amortisation basis if the residual maturity is upto _____ days.
   a. 30
   b. 45
   c. 60
   d. 90

4. Mutual funds value debt securities at values given by agencies authorised for the purpose by AMFI.
   a. True
   b. False

**Answers**

1 – c, 2 – a, 3 – c, 4-a

# 6. Accounting

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Calculation of NAV of a scheme
- Types of investor transactions
- Accounting aspects related to real estate mutual fund schemes

## 6.1. Net Asset Value

As discussed in the MFD Workbook, NAV of a scheme is the value of each unit of the scheme. Every scheme has a balance sheet viz. statement of assets and liabilities, based on which NAV is calculated.

The previous chapter explained how investments are valued in the scheme. Besides investment, the balance sheet of a scheme includes various other items, such as:

- Liabilities
    - Unit Capital viz. Number of units issued by the scheme X Face value of each unit (typically Rs 10).
    - Reserves (Revenue Reserve, Unrealised Appreciation Reserve, Unit Premium Reserve& Income Equalisation Reserve) – These capture the scheme's accumulated profits / losses, gains / losses in the scheme's investment portfolio, and the difference between the face value and price at which investors transact their units with the scheme. This is explained in the next section.
    - Current liabilities, which would include sundry creditors (the amount payable on investments purchased), and expenses such as custodial fees, registrar & transfer fees, auditor's fees, trustee fees & management fees that have been accrued as an expense, but not yet paid.
- Assets
    - Cash and money in bank
    - Current assets, which would include sundry debtors (the amount receivable on investments sold), and income such as dividend and interest that have been accrued, but are not yet received.
    - In the past, schemes were permitted to account the initial issue expenses as an expense, over a period of time. This practice, called 'deferred load' is no longer permitted. Initial issue expenses that have already been spent, but are yet to be treated as an expense, are shown in the asset side as 'Expenses not written off'.

The total assets would equal the total liabilities of the scheme. Let us consider the following simplified example of a scheme's balance sheet:

| **Description** | **Amount** (Rs in crore) |
|---|---|
| ***Liabilities*** | |
| Unit Capital [100crore units of Rs 10 each] | 1,000 |
| Reserves | 500 |
| Current liabilities | 50 |
| **Total Liabilities** | **1,550** |
| | |
| ***Assets*** | |
| Investments (at market value) | 1,490 |
| Cash & Bank | 20 |
| Current Assets | 40 |
| **Total Assets** | **1,550** |

The unit-holders' funds in the scheme are effectively the Unit Capital & Reserves viz. Rs 1,000 + Rs 500 i.e. Rs 1,500crore. This value, divided by the 100crore units gives the NAV as Rs 15.

Suppose the investments were purchased at Rs 1,200crore. The Unrealised Appreciation Reserve would be Rs 1,490 - Rs 1,200 i.e. Rs 290crore. Assume the other reserves comprise Revenue Reserves Rs 175crore and Unit Premium Reserve of Rs 35crore.

If the next day, investments were to appreciate from Rs 1,490crore to Rs 1,530crore, an additional amount of Rs40crore would go into Unrealised Appreciation Reserve, taking it to Rs 290 + Rs 40 i.e. Rs 330crore.

The unit-holders' funds in the scheme will also go up by Rs 40crore to Rs 1,540crore. This value, divided by the 100crore units gives the NAV as Rs 15.40. Thus, the appreciation in investment translates into an increase in the NAV, although the investments have not been sold.

If the following day, investments were to lose Rs 20crore in value, then the market value of investments and unrealised appreciation reserve would go down to the same extent. The corresponding decline in unit-holders' funds will drag down the NAV to Rs 15.20.

Revision of the investment value in line with changes in the market is called "Mark to Market" (MTM). On account of MTM, the NAV captures the current value of investments held by the scheme.

## 6.2. Investor Transactions

In the previous example, where NAV was Rs 15.00, the Unrealised Capital Appreciation was Rs 290crore. This value, divided by the 100crore units amounts to Rs 2.90 per unit. The par value of each unit, which is included in the Unit Capital is Rs 10. The balance portion of the NAV viz. Rs 15.00 –Rs 10.00 –Rs 2.90 i.e. Rs 2.10 can be said to represent income that is realised.

### 6.2.1. Sale of New Units

Suppose an investor bought 100 units from the scheme at Rs 15.00 per unit. The transaction is accounted as follows:

- Bank account of the scheme would go up by Rs 15.00 per unit X 100 units i.e. Rs 1,500.
- Unit capital will go up by Rs 10 per unit X 100 units i.e. Rs 1,000.
- Income Equalisation Reserve would increase by Rs 2.10 per unit X 100 units i.e. Rs 210.
- Unit Premium Reserve would increase by Rs 2.90 per unit X 100 units i.e. Rs 290.

The increase in unit-holders funds by Rs 1,000 + Rs 210 + Rs 290 i.e. Rs 1,500, and issue of additional 100 units, will keep the NAV at Rs 15.00.

In the past, schemes could issue units at a price higher than the NAV. The difference was called 'entry load'. For instance, if the units were sold at Rs 15.60 the excess over NAV viz. Rs 0.60, is the entry load. This would go into a separate account, from which the AMC could meet selling expenses. Mutual funds are currently not permitted to charge entry load.

### 6.2.2. Re-purchase of Existing Units

Suppose an existing investor offers 50 units for re-purchase at Rs 15.00 per unit. The transaction is accounted as follows:

- Bank account of the scheme would go down by Rs 15.00 per unit X 50 units i.e. Rs750.
- Unit capital will go down by Rs 10 X 50 units i.e. Rs500.
- Income Equalisation Reserve would decrease by Rs2.10 per unit X 50 units i.e. Rs 105.
- Unit Premium Reserve would decrease by Rs 2.90 per unit X 50 units i.e. Rs 145.

The decrease in unit-holders funds by Rs 500 + Rs 105 + Rs145 i.e. Rs750, and reduction of 50 units, will keep the NAV at Rs 15.00.

If exit load of 1% is applicable, then the investor will receive only Rs 15.00 less 1% viz. Rs 14.85. Earlier, the balance amount viz. Rs 0.15 per unit X 50 units i.e. Rs 7.50 would go into a separate account, from which the AMC could meet selling expenses. As per current SEBI requirements, the exit load amount needs to be written back to the scheme, thus benefiting the investors who continue in the scheme.

At the end of the year, the balance in the Income Equalisation Reserve is transferred to the Revenue Account. It would be shown separately from the net income for the period (which broadly comprises of Income on account of interest, dividend, capital gains etc. less the Scheme Running Expenses).

Balance in the Revenue Account after declaration of dividend becomes part of Revenue Reserves of the scheme.

### 6.2.3. Other Accounting Policies

- Dividend income earned by a scheme should be recognised, not on the date the dividend is declared, but on the date the share is quoted on an ex-dividend basis.

  Only for investments that are not quoted on the stock exchange, dividend income must be recognised on the date of declaration.

- In respect of all interest-bearing investments, income must be accrued on a day to day basis as it is earned. The income that is accrued but not yet received will be shown as Interest Recoverable in the asset side of the balance sheet.

  When such investments are purchased, interest paid for the period from the last interest due date upto the date of purchase must not be treated as a cost of purchase, but must be debited to Interest Recoverable Account.

  Similarly interest received at the time of sale, for the period from the last interest due date upto the date of sale, must not be treated as an addition to sale value but must be credited to Interest Recoverable Account.

- Transactions for purchase or sale of investments are recognised as of the trade date and not as of the settlement date.

  In the case of purchase, it will be added to the investment portfolio, and the amount payable would appear in the balance sheet under 'Sundry Creditors'.

  In the case of sale, the corresponding investment would be taken off the portfolio, and the amount recoverable would be reflected in the balance sheet under 'Sundry Debtors'.

- Where investment transactions take place outside the stock market(e.g. acquisitions through private placement or purchases or sales through private treaty), the transaction should be recorded in the event of a purchase, as of the date on which the scheme obtains an enforceable right to receive the security purchased and an enforceable obligation to pay the price.

  In the event of a sale, it is recorded when the scheme obtains an enforceable right to collect the proceeds of sale and an enforceable obligation to deliver the instruments sold.

- The cost of investments acquired or purchased should include brokerage, stamp charges and any charge customarily included in the broker's contract note (upto 0.12% for cash market transactions and 0.05% for derivative transactions, as discussed in Chapter 1, Para 1.2).

  In respect of privately placed debt instruments any front-end discount offered should be reduced from the cost of the investment.

- Underwriting commission should be recognised as revenue only when there is no devolvement on the scheme. Where there is devolvement on the scheme, the full underwriting commission received and not merely the portion applicable to the devolvement should be reduced from the cost of the investment.

- Holding cost of investments for determining the capital gains / losses is to be calculated on average cost basis.

- Bonus shares to which the scheme becomes entitled should be recognised only when the original shares on which the bonus entitlement accrues are traded on the stock exchange on an ex-bonus basis.

- Rights entitlements should be recognised only when the original shares on which the right entitlement accrues are traded on the stock exchange on an ex-rights basis.

## 6.3. Distributable Reserves

Mutual fund schemes are permitted to declare a dividend out of realised profits only. Thus, Revenue Reserve and Income Equalisation Reserve are available for distribution as dividend. However, dividend cannot be distributed from Unit Premium Reserve and Unrealised Appreciation Reserve.

## 6.4. Unique Aspects of Real Estate Schemes Accounting

The following are a few unique aspects of accounting related to real estate mutual fund schemes:

- The real estate asset shall be recognized on the date of completion of the process of transfer of ownership i.e. the date on which the real estate mutual fund scheme obtains an enforceable right including all significant risks and rewards of ownership.
- A real estate mutual fund scheme shall not recognise in the carrying amount of a real estate asset, the costs of the day-to-day servicing of such an asset. These costs are to be recognised in the revenue account as an expense.
- A real estate mutual fund scheme may acquire parts of real estate assets through replacement. For example, the interior walls may be replacements of original walls.

The real estate mutual fund scheme shall recognise in the carrying amount of a real estate asset, the cost of replacing part of an existing real estate asset at the time that cost is incurred. Further, the carrying amount of those parts that are replaced are to be eliminated from the assets and shown in the revenue account.

- Rental income is accrued on a daily basis, till the currency of the lease agreements.
- A gain or loss arising from a change in the fair value of the real estate asset is to be recognised in the Revenue Account for the period in which it arises. The gain that arises from the appreciation in the value of real estate asset is an unrealised gain, which cannot be distributed as dividend.
- If payment for a real estate asset sold is deferred, the consideration received is recognized, initially at the cash price equivalent. The difference between the nominal amount of the consideration and the cash price equivalent should be recognised as interest revenue over the period of credit.

## Exercise

**Multiple Choice Questions**

1. Which of the following are a part of unit-holders funds in the scheme?
   a. Unit Capital
   b. Unit Capital & Unit Premium
   c. Unit Capital & Income Equalisation Reserve
   d. Unit Capital, Unit Premium & Income Equalisation Reserve

2. Dividend receivable from listed companies should be recognised in the books of the scheme on _____.
   a. Ex-dividend date
   b. Book closure date
   c. Date dividend is paid
   d. Date dividend is announced

3. Front-end discount in a privately placed debenture should be recognised by the scheme as _____.
   a. Income, at the time of investment
   b. Income, at the time of allotment
   c. Income, spread equally over tenor of the instrument
   d. Reduction from the cost of investment

4. Rental income has to be recognised in a mutual fund scheme on _____.
   a. Date it has accrued and become due
   b. Date it has accrued, even if not due
   c. Date it is received by the scheme
   d. Date the lessee confirms payment

**Answers**

1 – d, 2 – a, 3 – d, 4-b

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# 7. Taxation

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Taxes applicable for AMCs
- Taxes applicable for Investors in mutual funds

Under the Income Tax Act, 1961 mutual funds are exempt from tax. However, the AMC has to pay a tax on its income (management fees earned from the schemes less expenses like rent and salaries incurred in running the operations), like any other company. The tax framework applicable for mutual fund schemes and investors is given below.

## 7.1. Taxes for AMCs

### 7.1.1. Securities Transaction Tax(STT)

Schemes pay this tax on their transactions in equity and equity related instruments in the market. The tax is payable at the following rates:

| | |
|---|---|
| Purchase of equity shares in a recognized stock exchange | 0.1% of value of shares bought |
| Sale of equity shares in a recognized stock exchange | 0.1% of value of shares sold |
| | |
| Sale of Derivatives (Futures) in a recognized stock exchange | 0.01% of trade value |
| Sale of Derivatives (Options) in a recognized stock exchange | 0.05% of the option premium |
| If the option is exercised | 0.125% of value of shares bought |
| Sale of units of equity oriented fund by the scheme that has invested in it to the mutual fund or in a recognised stock exchange | 0.001% of re-purchase price (paid by the mutual fund) or sale price (in recognised stock exchange) |

### 7.1.2. Income Distribution Tax

Debt Schemes need to pay this tax on the dividend they distribute to unit-holders. The applicable rates are as follows:

| | |
|---|---|
| Investors other than individuals and Hindu Undivided Family (HUF) | 30% plus 12% surcharge plus 2% Education Cess plus 1% Secondary & Higher Education Cess i.e. 34.608% |

| | |
|---|---|
| Investors who are Individuals & HUF | 25% plus 12% surcharge plus 2% Education Cess plus 1% Secondary & Higher Education Cess i.e. 28.84% |

The rates above need to be grossed up. For instance, if dividend declared is Rs100, individuals and HUF will receive Rs100 less 28.84% i.e. Rs71.16. Thus, DDT is not 28.84% on the dividend received by the investor (which is Rs71.16), but 28.84% on the dividend declared by the debt scheme (which is Rs100).

The income distribution tax does not vary with the marginal rate of taxation. Therefore, individuals and HUFs in the higher tax slabs might find it better to receive their income as dividend, on which the effective tax rate would be lower.

Income distribution tax is also applicable on investments in debt schemes held by investors, who are not otherwise liable to tax. Such investors might find it tax-efficient to invest in the growth option of debt schemes. They can meet their cash flow needs by offering their units for re-purchase. Income distribution tax is not applicable on re-purchases.

## 7.2. Taxes for Investors

### 7.2.1. Securities Transaction Tax

Like schemes, investors too bear STT on their equity and equity related investments at the rates outlined in section7.1.1.

### 7.2.2. Dividends

Dividend received in the hands of investors is exempt from tax. Dividend from debt schemes entails income distribution tax, as already explained.

Suppose that the NAV of an equity scheme goes up from Rs 10 to Rs 11. If the scheme pays out Re 1 as dividend, then NAV of the scheme would go down to Rs 11 - Re 1 i.e. Rs 10. The NAV after the dividend distribution is called *ex-dividend NAV.*

In the same situation of NAV going up to Rs 11, the debt scheme will not be able to pay Re 1 as dividend, because it also needs to provide for income distribution tax.

### 7.2.3. Capital Gains

The difference between the price at which the investor acquired the units, and the price at which they were sold is taxed as a capital gain. If the units have been held for more than a year (3 years for non-equity schemes), it qualifies to be a long term capital gain. Units sold after a holding period of upto a year (3 years for non-equity schemes) are taxable as short term capital gain.

The tax treatment of such long term and short term capital gains is different for equity and debt schemes:

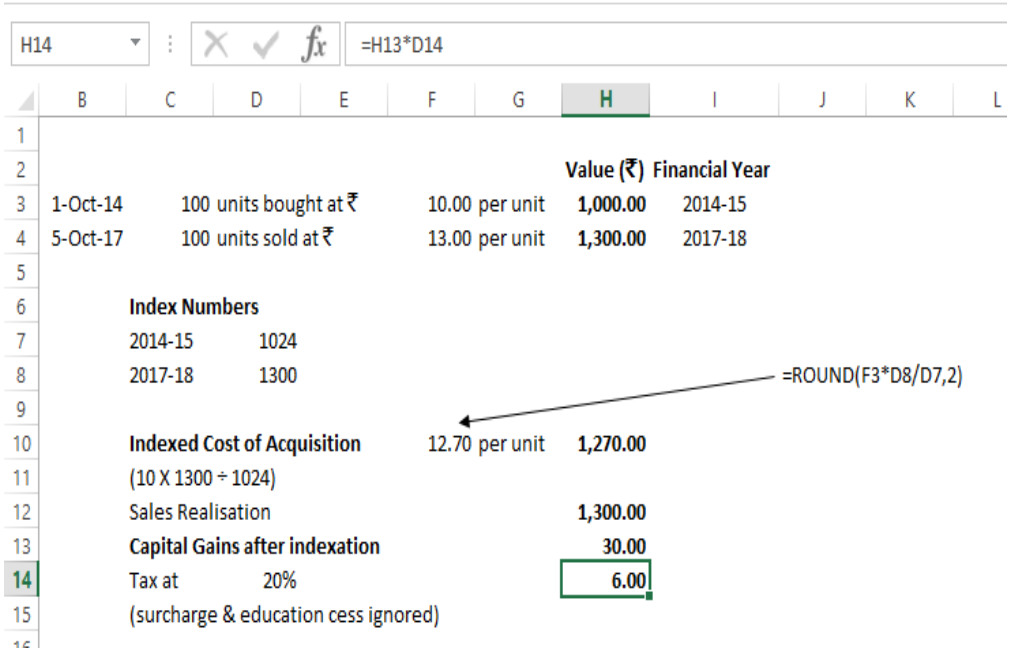
- Equity Schemes, where the investor has borne STT on the sale transaction:
    - Long term capital gains are exempt from tax.
    - Short term capital gains are taxable at 15% plus 5% surcharge plus 2% Education Cess plus 1% Secondary & Higher Education Cess i.e. 16.2225%.

  The Income Tax Act, 1961 defines equity scheme to be a scheme that invests at least 65% of its corpus in domestic equities. Schemes that do not meet this requirement would not enjoy the benefit of nil / 15% capital gains tax rate.

- Other schemes (including debt schemes, ETF-Gold Schemes)
    - The investor can take the benefit of indexation, in the case of long term capital gains. The cost of acquisition is adjusted for inflation between the financial year in which the units were acquired, and the financial year in which they are sold. The selling price minus the indexed cost of acquisition is taken as the long term capital gain, on which tax would be payable at 20% (plus surcharge and education cess).

      Suppose that the investor bought 100 units at Rs 10 on October 1, 2014.These are sold at Rs 13 on October 5, 2017. The government has declared the Cost Inflation Index to be 1024 for financial year 2014-15. Suppose it is 1300 for financial year 2017-18.

      Since the holding is for more than 3 years, it would qualify as a long term capital gain. Tax calculations are as shown in the following table:


H14
=H13*D14
=ROUND(F3*D8/D7,2)
Value (₹) Financial Year
1-Oct-14 100 units bought at ₹ 10.00 per unit 1,000.00 2014-15
5-Oct-17 100 units sold at ₹ 13.00 per unit 1,300.00 2017-18
Index Numbers
2014-15 1024
2017-18 1300
Indexed Cost of Acquisition 12.70 per unit 1,270.00
(10 X 1300 ÷ 1024)
Sales Realisation 1,300.00
Capital Gains after indexation 30.00
Tax at 20% 6.00
(surcharge & education cess ignored)

      If the units are purchased on different dates at different prices, then the cost of acquisition for the units sold is determined on First-in-first out (FIFO) basis.

- Short term capital gains are added to the income of the investor and taxed accordingly. Thus, taxation would depend on the tax slab of the investor.
  An investor who does not have any other income may find that the short term capital gains are exempt from tax. On the other hand, an investor in the higher tax slab may pay tax on capital gains at 30% plus surcharge and education cess.

### 7.2.4. Set-off and Carry Forward of Losses

The discussion so far focussed on capital gains. The investor might also book a loss, which may be long term or short term. Subject to conditions, the loss can be set off against gains; in that case, the tax that would otherwise have been payable on the gain can be avoided. If the loss in a financial year is more than the gain in that year, it can be carried forward for set-off against gains in future years. Thus, the loss in a financial year may help in minimising the capital gains tax in a future financial year. The set-off is permitted as follows:

- Capital loss cannot be set off against any other kind of income.
- Speculation loss can only be set off against speculation profit. It can be carried forward for 4 financial years.
- Short term capital loss can be set off against any capital gain, long term or short term. It can be carried forward for 8 financial years.
- Long term capital loss is to be set off only against long term capital gain. It can be carried forward for 8 financial years.
- Long term capital loss arising out of sale of equity or equity oriented mutual fund units (where STT has been paid) is not available for set off against any other capital gains.

### 7.2.5. Dividend Stripping

Suppose an investor buys units within 3 months prior to the record date for a dividend, and sells those units within 9 months after the record date. If there is a capital loss, then that would not be allowed to be set off against other capital gain of the investor, up to the value of the dividend income exempted.

### 7.2.6. Bonus Stripping

Suppose an investor buys units within 3 months prior to the record date for a bonus issue, and sells those units within 9 months after the record date. If there is a capital loss on the sale of the original units, then that would not be allowed to be set off against other capital gain of the investor. Instead, such capital loss would be treated as the cost of acquisition of the bonus units.

## Exercise

**Multiple Choice Questions**

1. Securities Transaction Tax is applicable on
   a. Equity Schemes
   b. Equity Schemes & Debt schemes other than liquid schemes
   c. Debt Schemes
   d. Equity and Debt schemes

2. Dividend distribution tax is applicable at ___% on investors other than individuals and HUFs
   a. 12.5%
   b. 25%
   c. 30%
   d. 20%

3. The minimum holding period for capital gains to qualify as long term in the case of ETF-Gold scheme is
   a. 1 year
   b. 2 years
   c. 3 years
   d. 24 months and 1 day

4. Long term capital loss can be set off against
   a. Long term capital gain
   b. Short term capital gain
   c. Any other head of income, except speculation gain
   d. All the above

**Answers**

1 – a, 2 – c, 3 – c, 4-a

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# 8. Investor Services

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about some of the processes behind:

- New Fund Offer
- Open ended and Close ended funds
- Exchange traded funds
- Nomination and pledge facility in case of mutual funds

## 8.1. New Fund Offer

In an NFO, besides the Official Points of Acceptance viz. offices of the AMC and RTA, applications are also received by collection bankers appointed by the AMC.

Different payment options were discussed in the MFD Workbook. All payment instruments, including those received by the AMC and RTA are banked with the collection bankers.

The bankers certify the collections information. This is reconciled with the RTA's records. Accordingly, the AMC proceeds with the allotment of units. These activities are conducted during the 'no transaction period' which is usually a period of 5 days from closure of the NFO.

Allotment formalities need to be completed and Statement of Accounts despatched to investors within 5 days from NFO Closure. Extended time-frame is available for allotment in the case of ELSS and RGESS schemes.

The date of allotment is called *inception date*. The scheme starts declaring its NAV from the following day, which is also the day when open-end schemes are opened for on-going transactions.

## 8.2. Open-end Fund

The period when on-going transactions are permitted in an open end scheme is called *continuous offer* period. It starts from the day after the inception date.

Transaction requests (for sale or re-purchase) can only be submitted at the Official Points of Acceptance viz. offices of the AMC and RTA. The offices of brokers who meet specific conditions, qualify as Official Points of Acceptance. The time printed in the contract note from the stock exchange system is treated as the time stamp.

During the continuous offer period, sale and re-purchase transactions happen at NAV based prices. Intra-day cut-off timing has been specified to determine the applicable NAV.

Transaction slips sent to investors along with the Statement of Accounts have the folio number of the investor pre-printed. Investors can also use blank transaction slips available in offices of AMC, RTA and distributors.

Based on the transaction requests, the following steps are initiated:

- The Treasury department of the AMC is informed of the sale and re-purchase volume, so that they can plan their investments or disinvestments.
- The AMC's Fund Accounting department calculates the NAV, after considering day-end portfolio values and the day's sale / re-purchase transactions. The day-end NAV is communicated to the RTA.
- Based on the NAV information, the RTA proceeds with the crediting of the new units (for sale transaction) or deducting the re-purchased units from the folio of the investor.

Transactions in open-end mutual fund units through transaction engines of the stock exchanges was discussed in Para 3.2 in Chapter 3.

## 8.3. Closed-end Fund

Closed-end funds are listed in the stock exchange. Therefore, the investor will have to approach a broker to transact in those units. As required by the stock exchange system, the investor needs to have a demat account whose details are registered with the broker.

If the investor has an online trading account with the broker, then he can issue the buy / sell instruction through the internet. In other cases, the broker will enter the details on behalf of the investor. The investor can either specify a limit price for the transaction, or leave it at the market price.

The stock exchange trading system will match the buy (or sell) orders with sell (or buy) orders in the system. Wherever there is a match, the order execution information is sent to the terminals of the broker representing the buyer and the broker representing the seller.

If a limit price is given, the order will be executed at a price better than or equal to the limit price i.e., buy transaction will be executed at prices lower than or equal to the limit price. Sale orders will be executed at prices higher than or equal to the limit price. Orders that remain unexecuted at the end of the day will lapse.

If the order is placed without a limit price i.e. at the market, then it has a greater chance of being executed i.e. the order would not lapse at the end of the day.

The investor would need to make payment for purchases or ensure that the units are available in the demat account for the sales, as per the stock exchange settlement system. When the stock exchange completes the pay-out, investors who have sold will receive their money and investors who have bought will receive their units in their demat accounts.

## 8.4. Exchange Traded Fund

The ETF transactions of investors with brokers would be similar to what has been mentioned earlier for trading in closed-end schemes. ETF also receive and give securities, post-NFO, in the case of large investors. Accordingly, new units are issued or existing units redeemed. The steps involved in this were discussed in Chapter 1.

## 8.5. Nomination

The unit-holder has a right to nominate one or more persons (upto three) in whom the units shall vest in the event of his death.

Where the units are held by more than one person jointly, the nomination needs to be done by the joint unit-holders together.

The nomination can be made only by individuals applying for / holding units on their own behalf singly or jointly. Non-individuals including society, trust, body corporate, partnership firm, Karta of Hindu Undivided family, holder of Power of Attorney cannot nominate.

If the nominee is a minor, the name, address and signature of the guardian of the minor nominee(s) is to be provided by the unit-holder.

Nomination can also be in favour of the Central Government, State Government, a local authority, any person designated by virtue of his office or a religious or charitable trust.

The Nominee shall not be a trust (other than a religious or charitable trust), society, body corporate, partnership firm, Karta of Hindu Undivided Family or a Power of Attorney holder. A non-resident Indian can be a nominee subject to the exchange control regulation in force, from time to time.

Nomination in respect of the units stands rescinded upon the transfer of units.

In case of multiple nominees, the percentage of allocation/share in favour of each of the nominees should be indicated against their name and such allocation/share should be in whole numbers without any decimals making a total of 100 percent.

If the aggregate is less than 100%, then the balance will be re-balanced to the first unit-holder. If the aggregate is greater than 100% then nomination would be rejected.

In the event of the unit-holders not indicating the percentage of allocation/share for each of the nominees, the Mutual Fund / Asset Management Company shall settle the claim equally amongst all the nominees.

Transfer of units in favour of Nominee(s) is a valid discharge by the Asset Management Company against the legal heir.

The cancellation of nomination can be made only by those individuals who hold units on their behalf singly or jointly and who made the original nomination.

On cancellation of the nomination, the nomination shall stand rescinded and the asset management company shall not be under any obligation to transfer the units in favour of the Nominee(s).

The format of the nomination form is given in Annexure 8.1.

## 8.6. Pledge

Investors can borrow money against pledge of their mutual fund units. The documentation for borrowing varies between different lenders.

In order to mark the lien / pledge / hypothecation / charge on his mutual fund units, the investor will have to submit a request to the mutual fund, specifying his folio number, scheme name, number of units to be charged, and the person in whose favour the charge is to be created. Based on this, the RTA will mark the charge in its records.

Once the charge is created, the investor will not be able to sell those units or offer them for re-purchase, though he can continue receiving the dividend.

In order to release the charge, the person in whose benefit the charge has been created will have to confirm. Thereafter, the units are available for sale / re-purchase by the investor.

## Annexure 8.1

FORM FOR NOMINATION / CANCELLATION OF NOMINATION
(to be filled in by individual(s) applying singly or jointly)

Name of the Mutual Fund: Date : DD/MM/YYYY

I/We, _____, _____ and _____ * do hereby nominate the person(s) more particularly described hereunder / and / cancel the nomination made by me / us on the _____ day of _____ in respect of units held by me / us under Application / Folio No. _____. (*Strike out whichever is not applicable)

| Name and Address of Nominee | Date of Birth | Name and Address of Guardian | Signature of Guardian | Proportion (%) |
|---|---|---|---|---|
| | (to be furnished in case nominee is minor) | | | |
| | | | | |
| | | | | |
| | | | | |

| Name and Address of Applicant (s) | Signature of Applicant (s) |
|---|---|
| | |
| | |
| | |

## Exercise

**Multiple Choice Questions**

1. In an NFO, applications are received at _____.
   a. Offices of AMC
   b. Offices of AMC and RTA
   c. Branches of Collection Banks
   d. All the above

2. Allotment formalities need to be finalised within ___ days of closure of NFO.
   a. 10
   b. 7
   c. 5
   d. 3

3. Inception date is _____.
   a. Date issue is launched
   b. Date of allotment
   c. Date NAV-based transactions start
   d. Date prior to date of allotment

4. Unit-holder can nominate upto ___ nominee(s).
   a. 1
   b. 2
   c. 3
   d. 5

**Answers**

1 – d, 2 – c, 3 – b, 4-c

# 9. Scheme Evaluation

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Different measures of risk and return to evaluate mutual fund schemes
- Benchmarks and Relative Returns in case of mutual funds
- Risk adjusted returns

The MFD Workbook covered various qualitative aspects that go into evaluating mutual fund schemes, and recommending them to investors. The quantitative techniques to scheme evaluation revolve around measurement of risk and return, and their combination as part of various risk-adjusted return frameworks.

## 9.1. Measures of Return

Scheme returns can be calculated in various ways. In order to ensure fairness in the market, SEBI has issued guidelines on how they should be determined in various scenarios.

### 9.1.1. Simple Return

Suppose the NAV of a scheme has gone up from Rs 10 to Rs 10.50, and it has not declared a dividend, then the scheme has generated a return of {(Rs 10.50 - Rs 10) ÷ Rs 10} X 100 i.e. 5%. This is the *simple return*.

If the scheme had declared a dividend of Rs 0.30 per unit, then that aspect of the return is not captured in the above calculation. Without the dividend payment, the NAV might have been Rs 10.80, instead of Rs 10.50. In that case, the simple return would have been {(Rs 10.80 - Rs 10) ÷ Rs 10} X 100 i.e. 8%. This simplistic approach of adding back the dividend component in the scheme return is called *total return*.

Most schemes have a growth option, where dividend is not declared. Calculating the simple return based on NAV of the growth option of a scheme is a superior approach as compared to the *total return* calculation for the dividend option of the same scheme.

While announcing their returns for periods shorter than a year, schemes are required to disclose the simple return.

### 9.1.2. Annualised Return

The above example of 5% return is good if it was earned during a 2 month period; but not so, if it was earned over an entire year. This context of time period is introduced in simple return calculation through annualisation viz. converting the return into its annual equivalent.

If 5% return was earned over 2 months, then the annualised return would be (5% ÷ 2) X 12 i.e. 30%. The same 5% return earned over 6 months translates into an annualised return of (5% ÷ 6) X 12 i.e. 10%.

While announcing their returns for periods shorter than a year, liquid schemes are permitted to use annualised return, so long as the annualisation does not reflect an unrealistic or misleading picture of the performance or future performance of the scheme.

This flexibility for liquid schemes is available if a performance figure is available for at least 7 days, 15 days and 30 days. In all other cases of periods shorter than a year, the mutual fund adds an asterisk after the return, and then discloses the period to which the return pertains. For example:
"5%*
* Return relates to 2 months"

### 9.1.3. Compounding of Periodic Returns

The above returns were 'point to point' returns. They did not capture fluctuation in performance between the start point and end point. In order to capture the fluctuations in performance, simple returns are calculated for a series of short, constant time periods (periodic returns). For instance, weekly returns may be calculated for a year. These periodic returns are then averaged to arrive at an average periodic return, which in turn is compounded to arrive at an annual return. The compounding is done, using the formula:

$$\{(1 + \text{Periodic Return})^{\text{No. of Periods equivalent to a year}}\} - 1.$$

While working with weekly returns, 52 weeks will be equivalent to a year; in the case of monthly returns, 12 months would be equivalent to a year.

Suppose the closing NAV on 5 consecutive weeks is Rs 10.00, Rs 10.05, Rs 10.02, Rs 10.15 & Rs 10.20. The calculations would be as shown in the following table:

C14 $f_x$ =(1+C12)^52-1

| | A | B | C | D |
|---|---|---|---|---|
| 2 | | | | |
| 3 | **Week** | **NAV (₹)** | **Weekly Return** | |
| 4 | 1 | 10.00 | | |
| 5 | 2 | 10.05 | 0.50% | |
| 6 | 3 | 10.02 | -0.30% | |
| 7 | 4 | 10.15 | 1.30% | |
| 8 | 5 | 10.20 | 0.49% | |
| 9 | | | | |
| 10 | Sum of Weekly Return | | 1.99% | |
| 11 | | | | |
| 12 | Simple Average | | 0.50% | |
| 13 | | | | |
| 14 | Simple Average Compounded | | 29.47% | |

### 9.1.4. Compounded Annualised Growth Rate (CAGR)

This is the SEBI-prescribed method of disclosing returns, by all schemes for time periods longer than a year. Here, the dividends declared during the period are presumed to have been re-invested in the same scheme at the ex-dividend NAV. Based on this presumption, the closing number of units is calculated. Compounded annual growth in wealth during the period is calculated, using the compound interest formula viz. (Closing Wealth ÷ Opening Wealth)$^{(1/n)}$ – 1, where 'n' is the time period in years.

Suppose an investor bought 120 units in a scheme on January 1, 2011 at Rs 10 per unit. On April 1, 2011, the scheme declared dividend of Rs 1 per unit, after which the ex-dividend NAV was Rs 12 per unit. On April 6, 2012, the scheme declared another dividend of Rs 1 per unit, after which the ex-dividend NAV was Rs 13 per unit. What is the CAGR from January 1, 2011 to April 6, 2012?

The calculations are shown in the following table:

On April 1, 2011, dividend of Re1 per unit would have yielded Rs 120 on the 120 units held. Re-investing at the ex-dividend NAV of Rs 12 would give Rs 120 ÷ Rs 12 i.e. 10 additional units. Thus the unit holding would go up to 130.

On April 6, 2012, dividend of Rs 1 per unit would have yielded Rs 130 on the 130 units held. Re-investing at the ex-dividend NAV of Rs 13 would give Rs 130 ÷ Rs 13 i.e. 10 additional units. Thus the unit holding would go up to 140. At the ex-dividend NAV of Rs 13, the closing wealth would be 140 X Rs 13 i.e. Rs 1,820.

'n', the time period between January 1, 2011 and April 6, 2012, is 461 days i.e. 461 ÷ 365 years. Since the formula uses the term '1÷n', the actual term applied in the formula is (365 ÷ 461).

The CAGR during the period is (1,820 ÷ 1,200)$^{(365 \div 461)}$ – 1 i.e. 39.07%.

As with simple return, the calculations get simpler if the growth option of the scheme is taken as the base. Since no dividend is declared, all the intermediate calculations can be avoided.

### 9.1.5. Load-Adjusted Return

If exit load of 1% was applicable, the investor would get only Rs 13 less 1% i.e. Rs 12.87 on re-purchase. The realisation on 140 units would be Rs 1,802. The CAGR for the investor would be (1,802 ÷ 1,200)$^{(365 \div 461)}$ – 1 i.e. 37.96%.

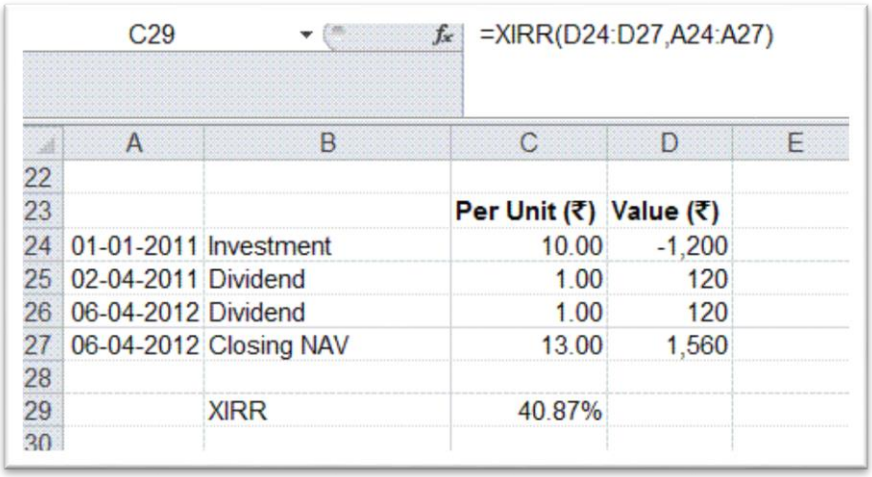
The scheme announces its CAGR on the basis of NAV. However, the investor may have invested at higher than NAV (if there was an entry load). Similarly, investor may recover less than NAV (if there is an exit load or Contingent Deferred Sales Charge). The investor's actual return would be lower on account of such loads.

### 9.1.6. XIRR

The CAGR approach to calculating returns, though technically sound, can get cumbersome when dividends are to be considered. The assumption that each dividend is re-invested at the ex-dividend NAV makes it essential to know not only the dividends declared, but also the ex-dividend NAV after each such dividend.

An alternate approach is 'XIRR' a function that can be used in MS Excel. The syntax is '=XIRR (range of cells where the cash flows are listed, range of cells where the respective dates are listed)'. Outflows (investment) from the investor have to be shown as negative cash flows, while inflows (dividend, re-purchase) and closing value for the investor have to be shown as positive cash flows.

For the earlier case, where CAGR was calculated as 39.07%, the XIRR calculations are shown in the following snapshot of the MS Excel spread sheet. The number of units remains the same because dividends are not presumed to be re-invested.




| | A | B | C | D | E |
|---|---|---|---|---|---|
| 22 | | | | | |
| 23 | | | **Per Unit (₹)** | **Value (₹)** | |
| 24 | 01-01-2011 | Investment | 10.00 | -1,200 | |
| 25 | 02-04-2011 | Dividend | 1.00 | 120 | |
| 26 | 06-04-2012 | Dividend | 1.00 | 120 | |
| 27 | 06-04-2012 | Closing NAV | 13.00 | 1,560 | |
| 28 | | | | | |
| 29 | | XIRR | 40.87% | | |
| 30 | | | | | |

The XIRR function presumes that all the dividends would be re-invested at the same XIRR rate. Since the re-investment assumption is different, the calculated return too is different (40.87%).

Official documents of the scheme disclose the CAGR, because that is mandated by SEBI. The market however uses XIRR more commonly, because it is easier to calculate.

## 9.2. Measures of Risk

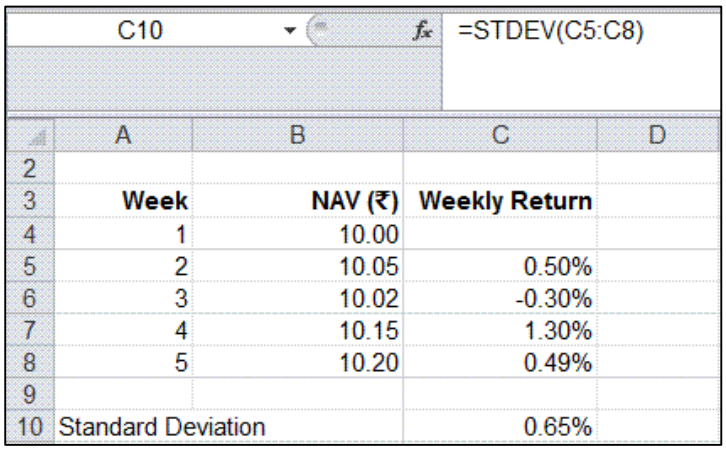
Two measures of risk are used in various risk-adjusted return frameworks – standard deviation and beta. It would be technically correct to use beta only in the case of diversified equity schemes. Standard deviation can however be used for all scheme types.

### 9.2.1. Standard Deviation

The NAV of any scheme would keep fluctuating in line with changes in the valuation of securities in its portfolio. The change in NAV of the growth option of a scheme captures the

scheme's return, as already discussed. The return can thus be calculated at different points of time, while keeping the time period constant.

In the example earlier used for compounding of periodic returns, the standard deviation of the periodic returns can be calculated, using the '=stdev' function in MS Excel, as follows:




| | A | B | C | D |
|---|---|---|---|---|
| 2 | | | | |
| 3 | **Week** | **NAV (₹)** | **Weekly Return** | |
| 4 | 1 | 10.00 | | |
| 5 | 2 | 10.05 | 0.50% | |
| 6 | 3 | 10.02 | -0.30% | |
| 7 | 4 | 10.15 | 1.30% | |
| 8 | 5 | 10.20 | 0.49% | |
| 9 | | | | |
| 10 | Standard Deviation | | 0.65% | |

*Standard deviation* is a statistical measure of how much the scheme's return varies based on its own past standard. It is a measure of total risk in the scheme. Higher the standard deviation, more risky the scheme is.

The standard deviation has been calculated above, based on weekly returns. 52 weeks represent a year. Therefore, the standard deviation can be annualised by multiplying the weekly number by the square root of 52 [written in excel as 'sqrt(52)'].

The annualised standard deviation would therefore be 0.65 X sqrt(52) i.e. 4.70% (rounded).

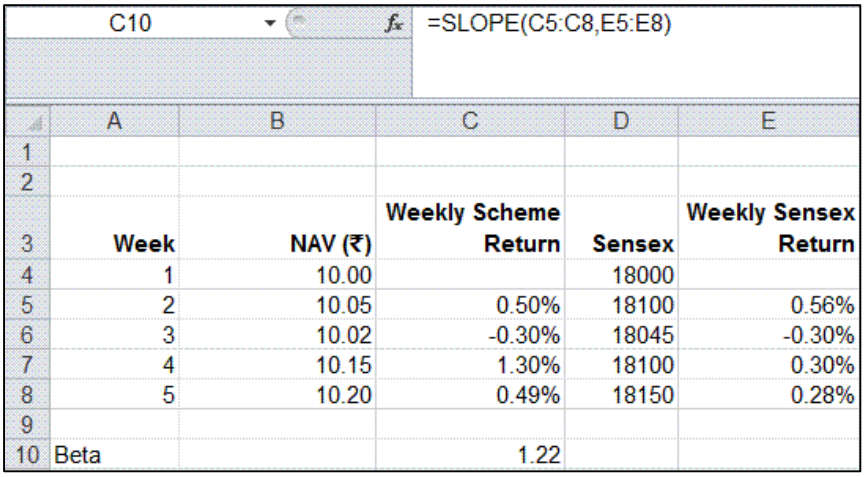
While working with monthly returns, the standard deviation would be multiplied by sqrt(12); in the case of daily returns, it would be multiplied by sqrt(252), because, typically there are 252 trading days in a year, after keeping out the non-trading days (Saturdays, Sundays, holidays).

### 9.2.2. Beta

An alternative approach to viewing risk is to consider, based on past data, how sensitive the scheme's returns are, to changes in returns on a benchmark i.e. for every 1% change in benchmark returns, how much is the change in the scheme's returns?

This is done by picking up the closing value of the benchmark for the same 5 weeks as above, and calculating the weekly benchmark returns for Weeks 2 to 5. Beta can be easily calculated, using the 'slope' function in MS Excel, as shown in the following table with Sensex as the benchmark:

This means that based on past data, the scheme's returns tend to change at 1.22 times the change in the Sensex returns. Thus, it is more risky than the Sensex.



C10 =SLOPE(C5:C8,E5:E8)

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | **Week** | **NAV (₹)** | **Weekly Scheme Return** | **Sensex** | **Weekly Sensex Return** |
| 4 | 1 | 10.00 | | 18000 | |
| 5 | 2 | 10.05 | 0.50% | 18100 | 0.56% |
| 6 | 3 | 10.02 | -0.30% | 18045 | -0.30% |
| 7 | 4 | 10.15 | 1.30% | 18100 | 0.30% |
| 8 | 5 | 10.20 | 0.49% | 18150 | 0.28% |
| 9 | | | | | |
| 10 | Beta | | 1.22 | | |

Application of Beta in the markets is based on the Capital Assets Pricing Model, which states that some risks (*non-systematic risk*) can be diversified away. Beta is a measure of the risks that cannot be diversified away (*systematic risk*).

A scheme that is less risky than the benchmark would be characterised by Beta being less than 1. Since an index fund mirrors the portfolio of the benchmark it tracks, index funds have a Beta closer to 1.

The concept of Beta has been explained above using weekly data, that too for only 5 weeks. Beta is normally calculated using daily data for long time periods, even going up to 3 years. Depending on the time period and frequency of data, different publications share different values of Beta for the same scheme or stock. Inter-scheme evaluation should be based on data and computation that is consistent between schemes.

## 9.3. Benchmarks and Relative Returns

The various kinds of returns discussed in Para 9.1, focused on the scheme. These are called *absolute returns*. Scheme returns can also be compared with external benchmarks such as the best scheme in the category, or average returns for the scheme category, or median return for the scheme category, or an index that is representative of the scheme's portfolio. Such comparison of a scheme's returns, relative to its benchmark, is called *relative returns.*

BSE's Sensex and NSE's NIFTY are good benchmarks for diversified equity portfolios, especially those that focus on large companies. Mid-cap and small-cap indices of these exchanges are suitable for schemes whose investment strategy is to invest in medium-size and small-size companies, respectively. Besides, several sectoral indices are available for sector funds.

ICICI Securities' I-Bex, which is based on the most liquid government securities, is an index that can be a benchmark for debt schemes. Depending on the nature of portfolio, schemes can select Si-Bex (1 – 3 years), Mi-Bex (3 – 7 years) or Li-Bex (over 7 years).

CRISIL too has created various indices such as Liquid Fund Index, Balanced Fund Index, Composite Bond Fund Index, MIP Blended Index & Short Term Bond Fund Index. These can be benchmarks for debt and hybrid funds.

When schemes are launched, they disclose the benchmark that is appropriate.

According to SEBI Regulations, when the scheme has been in existence for more than 3 years:

- Performance information is to be provided since inception and for as many twelve month periods as possible for the last 3 years, such periods being counted from the last day of the calendar quarter preceding the date of advertisement, along with benchmark index performance for the same periods.
- Point-to-point returns on a standard investment of Rs 10,000 are also to be shown in addition to CAGR for a scheme in order to provide ease of understanding to retail investors.

When a scheme's return is better than that of its benchmark, it is said to have out-performed its benchmark.

Where the scheme has been in existence for more than one year but less than three years, performance information is to be provided for as many as twelve month periods as possible, such periods being counted from the last day of the calendar quarter preceding the date of advertisement, alongwith benchmark index performance for the same periods.

Where the scheme has been in existence for less than one year, past performance should not be provided.

For the sake of standardization, a similar return in INR and by way of CAGR has to be shown for the following apart from the scheme benchmarks:

- For Equity Schemes: Sensex or Nifty
- For Long term debt scheme: 10-year GoI Security
- For Short term debt fund: 1 year T-Bill

When the performance of a particular mutual fund scheme is advertised, the advertisement shall also include the performance data of all the other schemes managed by the fund manager of that particular scheme.

In case the number of schemes managed by a fund manager is more than six, then the AMC may disclose the total number of schemes managed by that fund manager along with the performance data of top 3 and bottom 3 schemes (in addition to the performance data of

the scheme for which the advertisement is being made) managed by that fund manager in all performance related advertisement. However, in such cases AMCs shall ensure that true and fair view of the performance of the fund manager is communicated by providing additional disclosures, if required.

## 9.4. Risk-adjusted Returns

Investors need to consider both risk and return in their investment decisions. The following examples of risk-adjusted return frameworks are based, to the extent possible, on the earlier example where NAV for 5 weeks was considered. In reality, the evaluation is done based on data over long time periods of 1 to 5 years.

### 9.4.1. Sharpe Ratio

Sharpe Ratio measures the excess returns that a scheme has earned, per unit of risk taken. For the excess returns, the base is taken as risk-free return viz. the return that can be earned by investing in government. The return based on a Treasury Bill index is often used for the purpose.

Suppose the risk-free return is 7%. In the earlier example, the compounded return on the scheme was 29.47%, while the annualised standard deviation was 4.70%.

Sharpe Ratio can be calculated as (29.47% - 7%) ÷ 4.70%, which is 4.78. This Sharpe Ratio has to be compared with the Sharpe Ratio for other schemes of the same type. The scheme with the highest Sharpe Ratio has given the best return per unit of risk (standard deviation).

### 9.4.2. Sortino Ratio

The underlying principle here is that returns that are better than the standard are good, and should not be viewed as a risk. Therefore, only the annualised downside deviation – based on periods when the scheme return has gone below the minimum acceptable return - is to be considered.

Thus, Sortino Ratio = (Scheme Return – Risk-free Return) ÷ Downside Deviation.

As with Sharpe Ratio, a higher Sortino Ratio means that the scheme offers a better return per unit of risk.

### 9.4.3. Treynor Ratio

This too measures the excess return per unit of risk. Unlike Sharpe Ratio, which uses standard deviation, Treynor ratio uses Beta to measure risk.

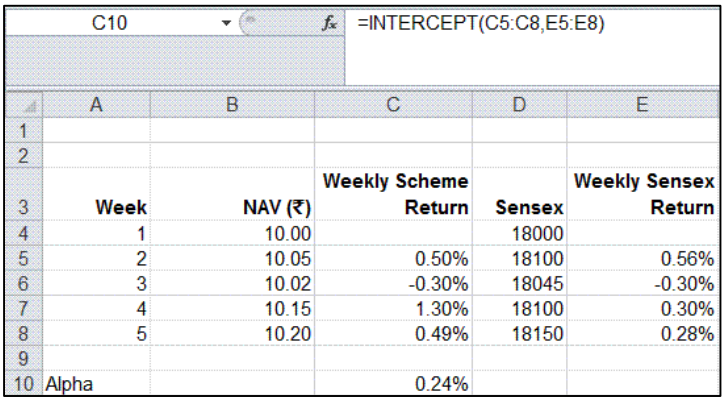
Thus Treynor Ratio = (Scheme Return – Risk-free Return) ÷ Beta.
In the earlier example, Beta was calculated to be 1.22. Thus, the Treynor Ratio is (29.47% - 7%) ÷ 1.22, which is 0.18

Among schemes of the same type, the one with the highest Treynor Ratio is superior.

Since Beta measures only systematic risk, Treynor Ratio would be more appropriate for diversified equity portfolios, where the non-systematic risks have been diversified away.

### 9.4.4. Jensen's Alpha

This is a measure of out-performance. It compares the actual scheme performance, with what it ought to have been, given the risk in the scheme. This is calculated by using the '=intercept' function in MS Excel, as shown below:




| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | **Week** | **NAV (₹)** | **Weekly Scheme Return** | **Sensex** | **Weekly Sensex Return** |
| 4 | 1 | 10.00 | | 18000 | |
| 5 | 2 | 10.05 | 0.50% | 18100 | 0.56% |
| 6 | 3 | 10.02 | -0.30% | 18045 | -0.30% |
| 7 | 4 | 10.15 | 1.30% | 18100 | 0.30% |
| 8 | 5 | 10.20 | 0.49% | 18150 | 0.28% |
| 9 | | | | | |
| 10 | Alpha | | 0.24% | | |

Here, the fund manager has outperformed to the extent of 0.24%. If alpha value is negative, it means that the fund manager under-performed i.e. earned a return lesser than what should have been earned, given the risk taken in the scheme.

Jensen's Alpha too should ideally be used, only for evaluating diversified equity portfolios. Further, the reliability of the measure should be established through a statistical measure called R-square. Higher the R-square value, more reliable is the Alpha measure.

### 9.4.5. Appraisal Ratio

Since Jensen Alpha considers only systematic risk, it is divided by the statistical measure of non-systemic risk to arrive at the Appraisal Ratio.
The inclusion of non-systematic risk in the denominator makes it possible to use Appraisal Ratio for all types of mutual fund schemes. Higher the ratio, better is the scheme.

### 9.4.6. Eugene Fama

Conceptually, it is like Jensen Alpha, with standard deviation as the measure of risk. It measures out-performance by comparing the actual scheme returns, with the returns that ought to have been earned, given the standard deviation risk.

The return that ought to have been earned can be taken to be equal to
Risk Free Return +

{(Standard Deviation of Scheme ÷ Standard Deviation of Market) X (Market Return – Risk Free Return)}

The relevant data from the earlier example is re-produced below:

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 2 | | | | | |
| 3 | **Week** | **NAV (₹)** | **Weekly Scheme Return** | **Sensex** | **Weekly Sensex Return** |
| 4 | 1 | 10.00 | | 18000 | |
| 5 | 2 | 10.05 | 0.50% | 18100 | 0.56% |
| 6 | 3 | 10.02 | -0.30% | 18045 | -0.30% |
| 7 | 4 | 10.15 | 1.30% | 18100 | 0.30% |
| 8 | 5 | 10.20 | 0.49% | 18150 | 0.28% |
| 9 | | | | | |
| 14 | Standard Deviation | | 0.65% | | 0.36% |
| 15 | | | | | |
| 16 | Anualised Standard Deviation | | 4.70% | | 2.62% |
| 17 | | | | | |
| 18 | Sum of Weekly Return | | 1.99% | | 0.83% |
| 19 | | | | | |
| 20 | Simple Average | | 0.50% | | 0.21% |
| 21 | | | | | |
| 22 | Simple Average Compounded | | 29.47% | | 11.42% |
| 23 | | | | | |
| 24 | Risk-free Return | | 7% | | |

Substituting the values in the formula, the return ought to have been
7%+ {(4.70% ÷ 2.62%) X (11.42% - 7%)}
i.e. 14.92%.

The scheme return was 29.47%. The Eugene Fama is 29.47% - 14.92% i.e. 14.55%.
The positive number indicates out-performance. Higher the positive number, better the scheme.

Since Eugene Fama uses standard deviation, which is a measure of total risk, it can also be used for portfolios other than diversified equity portfolios.

### 9.4.7. Modigliani & Modigliani ($M^2$)

In this approach, the scheme return is adjusted to reflect the difference in standard deviation between the scheme and the market. This $M^2$ value of the scheme can be directly compared to the market return. If the $M^2$ value is better than the market return, then the scheme has out-performed.

The $M^2$ value is given by the formula:

Risk Free Return +
{(Scheme Return – Risk Free Return) X
(Standard Deviation of Market ÷ Standard Deviation of Scheme)}

Substituting the values in the example:
$M^2$ = 7% + (29.47% - 7%) X (2.62% ÷ 4.70%)
i.e. 19.54%

Since this is higher than the market return of 11.42%, the scheme has done better than the market.

## 9.5. Limitations of Quantitative Evaluation

Quantitative evaluations are largely based on historical data. The past may or may not repeat itself. In particular, events which have never happened earlier can happen. As Nicholas Taleb reasons in "The Black Swan[2]", just because someone has not seen a black swan, it does not mean that all swans are white.

Taleb argues that some of these highly improbable events have "fat tails" i.e. when these events happen, the losses can be very high.

Investing based on quantitative evaluation, ignoring the improbable events that have fat tails, can spell disaster. It is therefore important to keep an eye on risks that are non-quantifiable too, and consider various subjective factors while taking investment decisions.

[2] Nassim Nicholas Taleb, The Black Swan: The Impact of the Highly Improbable, Penguin Books (2007)

## Exercise

**Multiple Choice Questions**

1. Which of the following is a sound measure for returns over long periods of time?
   a. Simple return
   b. Total Return
   c. Annualised Return
   d. CAGR

2. Over 18 months, the growth option of a scheme has gone up from Rs 10 to Rs 16. How much is the CAGR?
   a. 60%
   b. 40%
   c. $[(16 \div 10)^{(18 \div 12)}]-1$
   d. $[(16 \div 10)^{(12 \div 18)}]-1$

3. Appraisal Ratio can only be used in the case of diversified equity schemes.
   a. True
   b. False

4. ___ is a single number for the scheme, which can be compared with the market return.
   a. Sharpe Ratio
   b. Treynor Ratio
   c. Eugene Fama
   d. $M^2$

**Answers**

1 – d, 2 – d, 3 – b, 4-d

# 10. Asset Classes and Alternate Investment Products

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Different asset classes—Equity, Debt, Gold
- Alternate Investment Products—CPPI, PMS, structured products

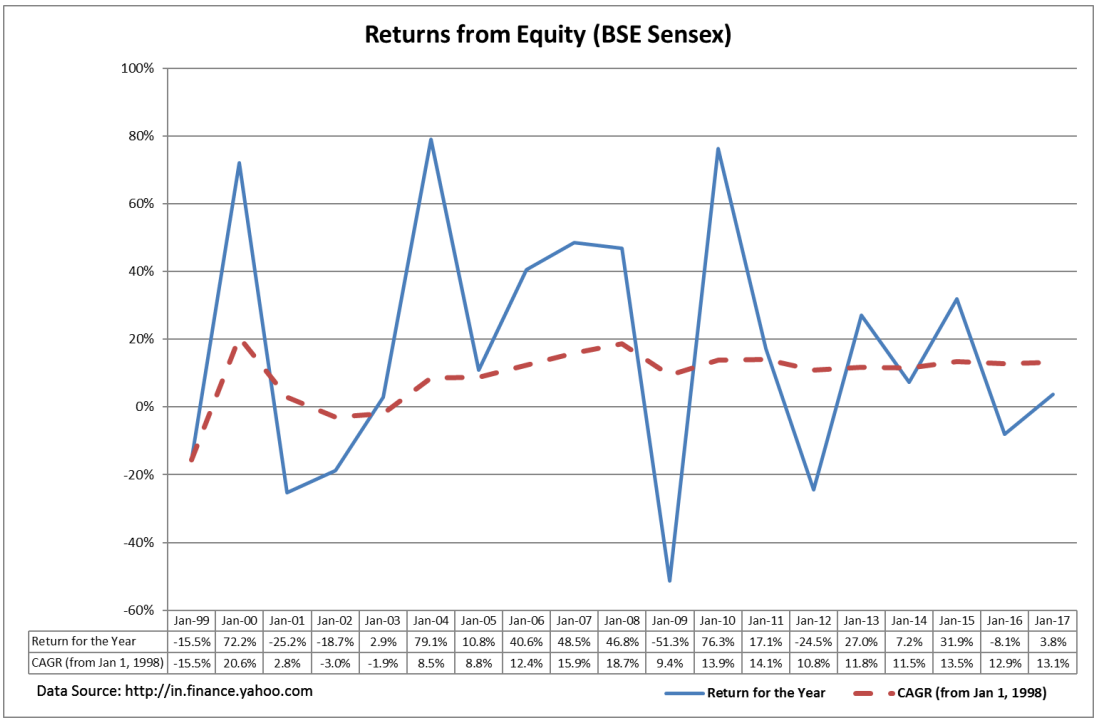
## 10.1. Historical Returns

### 10.1.1. Equity

Equity is considered to be a growth asset i.e. most of the returns are in the form of capital gains – and significant capital losses are also possible.

The following chart uses the BSE Sensex as benchmark to measure equity returns. As was discussed in the MFD Workbook, the BSE Sensex is calculated on the basis of equity shares of 30 large, profitable & liquid companies belonging to a diverse range of sectors. Thus, returns on the BSE Sensex are an indicator of the profitability of the cream of Indian corporate sector.

The graph shows the absolute returns for each year, as well as the compounded annual growth rate since January 1, 1998. Out of the 19 years, the absolute returns are negative in 6 years. Annual return upto Jan 2, 2009was down 51%, but it recovered the following year by 76%. Annual return upto Jan3, 2000 and Jan 2, 2004 again, returns were in excess of 70%. The returns in 1 year upto Jan 2, 2017 was 3.8%, below even bank interest rates.

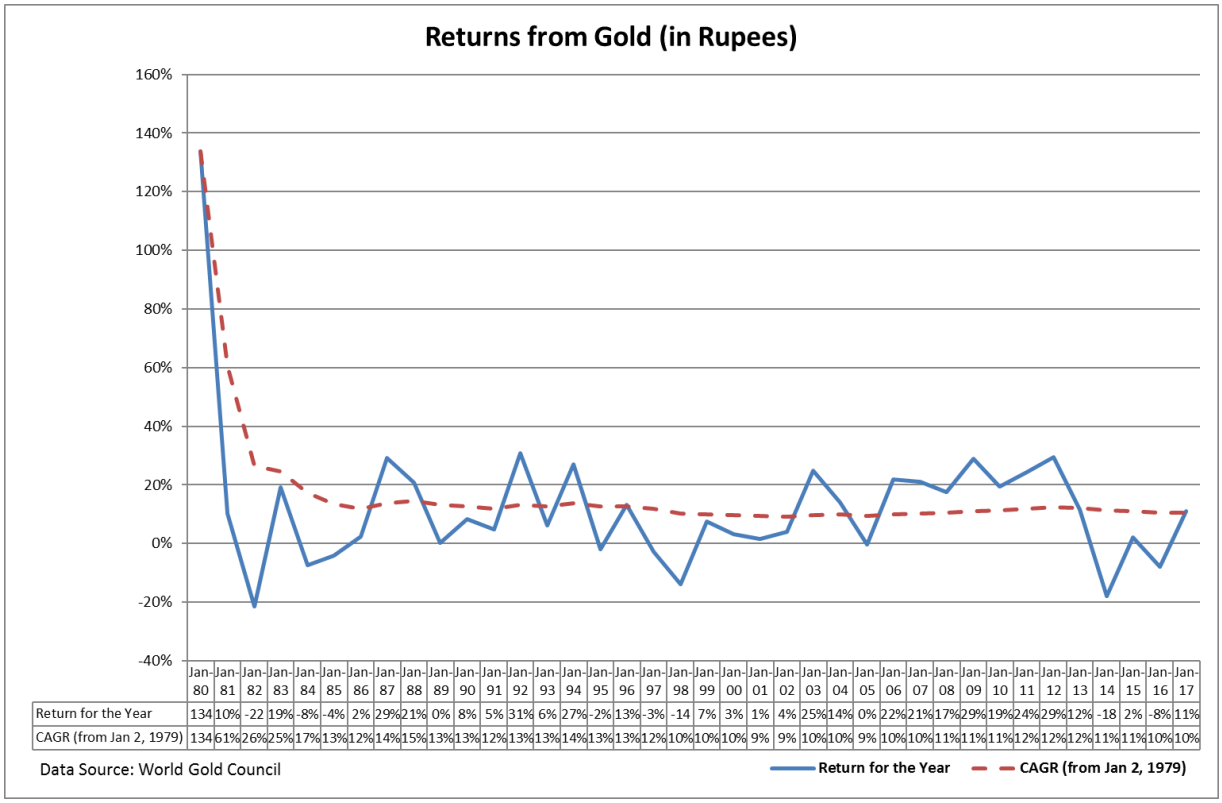



| | Jan-99 | Jan-00 | Jan-01 | Jan-02 | Jan-03 | Jan-04 | Jan-05 | Jan-06 | Jan-07 | Jan-08 | Jan-09 | Jan-10 | Jan-11 | Jan-12 | Jan-13 | Jan-14 | Jan-15 | Jan-16 | Jan-17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Return for the Year | -15.5% | 72.2% | -25.2% | -18.7% | 2.9% | 79.1% | 10.8% | 40.6% | 48.5% | 46.8% | -51.3% | 76.3% | 17.1% | -24.5% | 27.0% | 7.2% | 31.9% | -8.1% | 3.8% |
| CAGR (from Jan 1, 1998) | -15.5% | 20.6% | 2.8% | -3.0% | -1.9% | 8.5% | 8.8% | 12.4% | 15.9% | 18.7% | 9.4% | 13.9% | 14.1% | 10.8% | 11.8% | 11.5% | 13.5% | 12.9% | 13.1% |

Although the annual returns are very volatile, the fluctuation in the CAGR is much lesser. After the initial 5 years, the CAGR since January 1, 1998 is positive even during the years when the annual returns are negative. It is for this reason that investment in equities is advisable only if the investor has a long time horizon.

### 10.1.2. Gold

Like equity, gold is viewed as a growth asset. Gold does not yield a regular dividend, unlike equity where dividend could contribute to at least a small portion of return. The annual returns and CAGR since January 2, 1979 are depicted in the following chart.




| | Jan-80 | Jan-81 | Jan-82 | Jan-83 | Jan-84 | Jan-85 | Jan-86 | Jan-87 | Jan-88 | Jan-89 | Jan-90 | Jan-91 | Jan-92 | Jan-93 | Jan-94 | Jan-95 | Jan-96 | Jan-97 | Jan-98 | Jan-99 | Jan-00 | Jan-01 | Jan-02 | Jan-03 | Jan-04 | Jan-05 | Jan-06 | Jan-07 | Jan-08 | Jan-09 | Jan-10 | Jan-11 | Jan-12 | Jan-13 | Jan-14 | Jan-15 | Jan-16 | Jan-17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Return for the Year | 134 | 10% | -22 | 19% | -8% | -4% | 2% | 29% | 21% | 0% | 8% | 5% | 31% | 6% | 27% | -2% | 13% | -3% | -14 | 7% | 3% | 1% | 4% | 25% | 14% | 0% | 22% | 21% | 17% | 29% | 19% | 24% | 29% | 12% | -18 | 2% | -8% | 11% |
| CAGR (from Jan 2, 1979) | 134 | 61% | 26% | 25% | 17% | 13% | 12% | 14% | 15% | 13% | 13% | 12% | 13% | 13% | 14% | 13% | 13% | 12% | 10% | 10% | 10% | 9% | 9% | 10% | 10% | 9% | 10% | 10% | 11% | 11% | 11% | 12% | 12% | 12% | 11% | 11% | 10% | 10% |

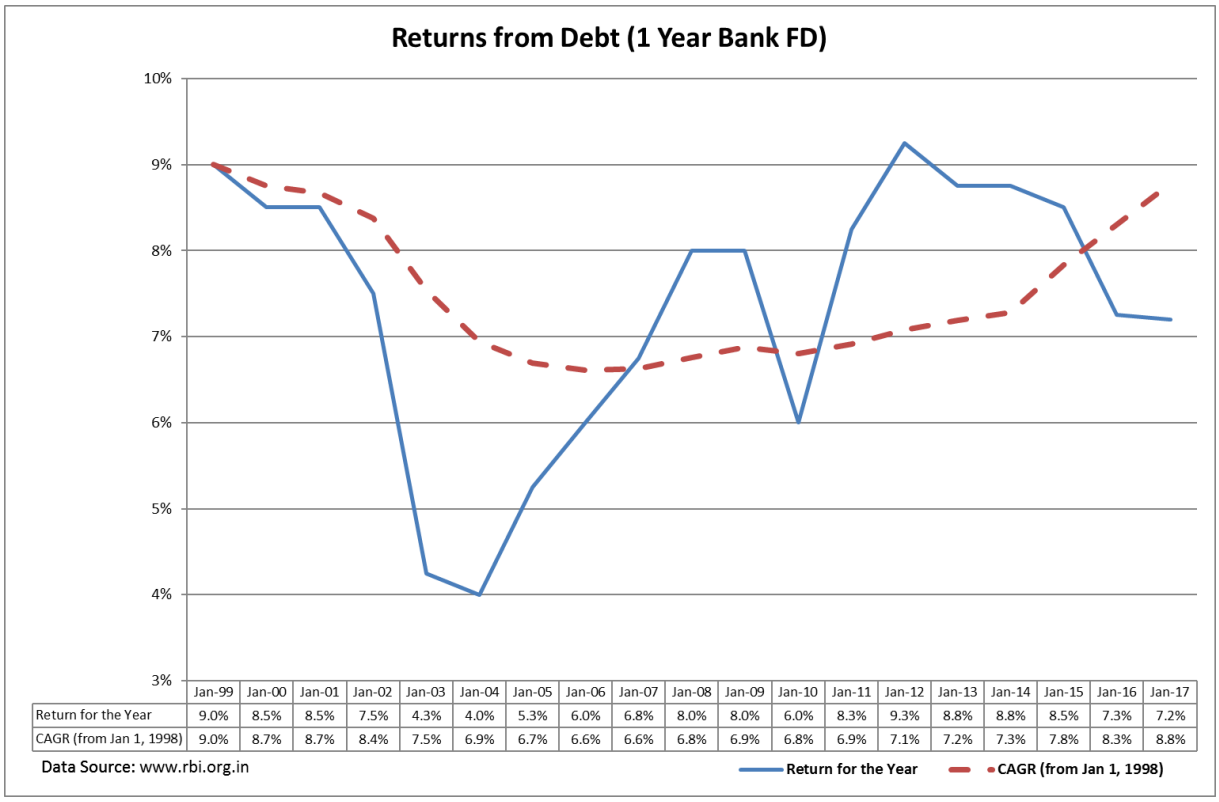
Gold was at a peak on January 1, 1980. This explains the high return of 134% for that year. During the 38 years, even gold has earned negative returns in 8 years, including a fall of 22% in the calendar year 1981 and 18% in the calendar year 2013. As compared with equity, the CAGR returns are less volatile, and have remained at 9% or higher during the period. The CAGR during the last 38 years is 7.99%.

### 10.1.3. Debt

Debt is considered an income asset, because a large part of the returns in debt comes out of interest income.

However, like equity, debt too is traded in the market. Depending on the price of debt securities in the market, there can be capital gains, or even capital losses. As already discussed, the element of capital gain or loss is lower in shorter term debt securities. The gain or loss are higher for longer term debt securities.

The interest rates that banks and other companies offer on their fixed deposits too changes in line with market conditions. The following chart depicts the annual returns and CAGR since 1998-99, if the investor invested in 1-year fixed deposits with banks.




| | Jan-99 | Jan-00 | Jan-01 | Jan-02 | Jan-03 | Jan-04 | Jan-05 | Jan-06 | Jan-07 | Jan-08 | Jan-09 | Jan-10 | Jan-11 | Jan-12 | Jan-13 | Jan-14 | Jan-15 | Jan-16 | Jan-17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Return for the Year | 9.0% | 8.5% | 8.5% | 7.5% | 4.3% | 4.0% | 5.3% | 6.0% | 6.8% | 8.0% | 8.0% | 6.0% | 8.3% | 9.3% | 8.8% | 8.8% | 8.5% | 7.3% | 7.2% |
| CAGR (from Jan 1, 1998) | 9.0% | 8.7% | 8.7% | 8.4% | 7.5% | 6.9% | 6.7% | 6.6% | 6.6% | 6.8% | 6.9% | 6.8% | 6.9% | 7.1% | 7.2% | 7.3% | 7.8% | 8.3% | 8.8% |

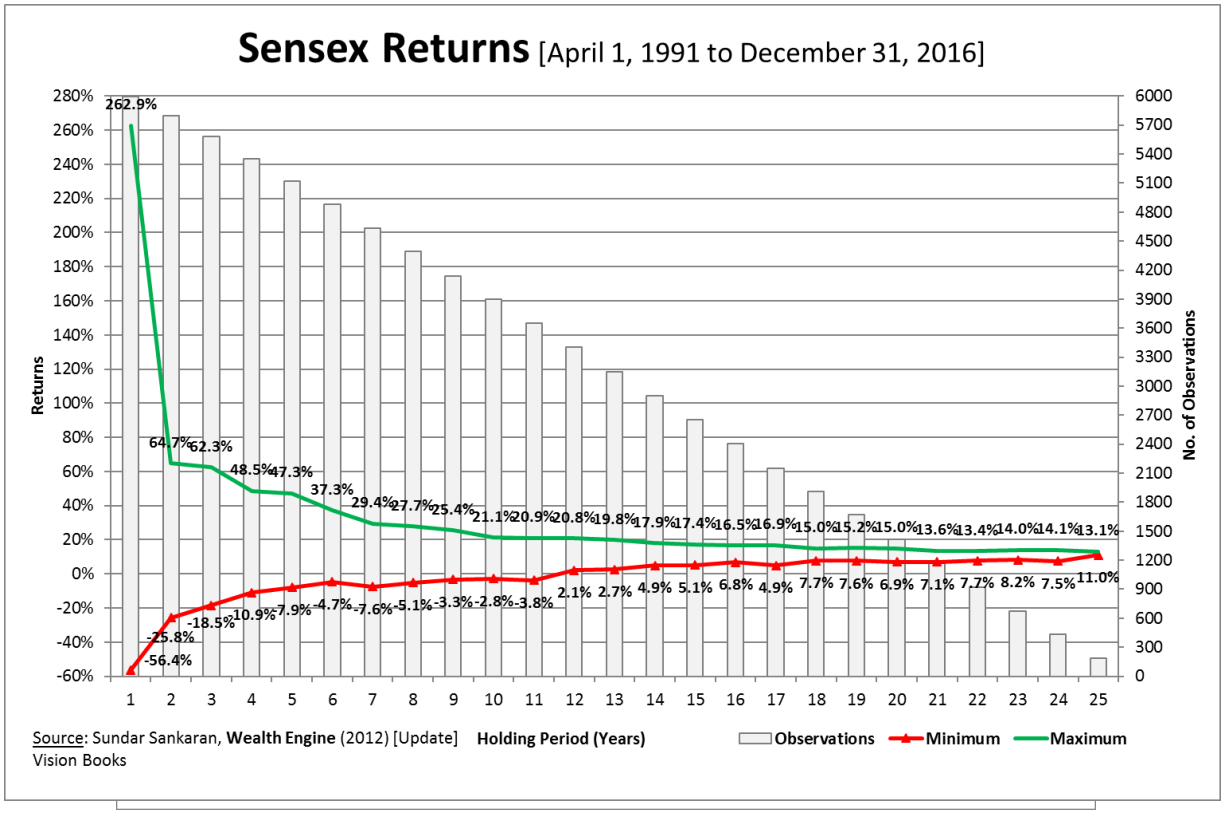
Since fixed deposit receipts do not get traded in the market, depositors do not experience fluctuation in value of their fixed deposits. Therefore, the graph does not show any instances of negative returns. Yet, if they were to seek premature return of their deposit, they will receive a return that is lower than what was committed when they initiated the deposit.

In the past, in the years 1991-92 and 1995-96, the fixed deposit rate had gone up to 12%. In 1998-99 and again in 2011-12, it crossed 9%. It has also gone down to 4% in 2003-04.

## 10.2. Perspectives on Asset Class Returns

- Investors need a mix of assets in their portfolio. This is called *asset allocation*, a topic that is discussed in the next Chapter.
- The mix of assets should include growth assets like equity, gold and real estate, as well as income assets like debt.
- Equity is an extremely volatile asset class, and should be considered only for long term investments.

The asset class returns discussed earlier in this chapter were based on annual returns, considering the Sensex values at the beginning of each year. It is possible to take a much closer look at change in equity values during the year, and assess the returns over different




time horizons. The following chart presents such a profile of returns, based on daily values of the Sensex since April 1, 1991.

Clearly the maximum returns tapers down, as the holding period increases. The minimum returns go up with the holding period, i.e. the downside risk is lower for longer holding periods. The corridor between the maximum and minimum — the range — gets narrower as the holding period increases[3].

During the period, there were 5,998 instances of 1-year rolling returns. The returns for such 1-year holding periods varied between -56% and +263%.

At the other extreme, there were 185 instances of 25-year rolling returns during the period analysed. The returns for such 25-year holding periods were within a narrow corridor of 11% to 13%.

[3] Sundar Sankaran, *Wealth Engine*, Vision Books (2012) [Update]

These returns are based on investment in the Sensex viz. passive investments. It is possible to earn higher returns based on active investment. Some factors to consider in such active investment were discussed in Chapter 4.

A few aspects of asset classes to note:

- Gold is less volatile than equity. It does well in situations of political or economic turmoil. Thus, it is an effective hedge against situations when financial markets perform poorly.
- Real estate again is less volatile. It tends to move more gradually, up or down, depending on the economic cycles. A benefit of real estate is that it is possible to earn a rental income, which will go up as the real estate values appreciate. Thus, it can be both a growth asset and an income asset.
- Debt is an income asset – a defensive asset to have in one's portfolio.

At the turn of the century, fixed deposit investors were worried. The fixed deposit interest rates were going down. As already discussed, when interest rates go down, the value of debt securities go up. This benefit of capital appreciation helped even some of the gilt schemes report returns in excess of 20%, in some of the years.

There is an important lesson from this experience. When interest rates are going down, debt investors are better off investing in suitable debt mutual fund schemes. This protects them from a phenomenon where fixed deposit investments yield lower and lower interest rates.

## 10.3. Alternate Investment Products

Investors have a range of non-traditional investment options too. Some of these are discussed in chapter 1 and some are discussed below.

### 10.3.1. Capital Protection Oriented Schemes

The MFD Workbook featured an introduction to these schemes. Such schemes are close-ended, and structured to ensure that the investor's capital is protected. The capital protection is ensured through any of the following structures:

- *Constant Proportion Portfolio Insurance (CPPI)* The following example from the MFD Workbook explains the concept.

Suppose an investor invested Rs10,000 in a capital protection oriented scheme of 5 years. If 5-year government securities yield 7% at that time, then an amount of Rs7,129.86 invested in 5-year zero-coupon government securities would mature to Rs10,000 in 5 years. Thus, by investing Rs7,129.86 in the 5-year zero-coupon government security, the scheme ensures that it will have Rs10,000 to repay to the investor in 5 years.

After investing in the government security, Rs2,870.14 is left over (Rs10,000 invested by the investor, less Rs7129.86 invested in government securities). This amount is invested in riskier securities like equities. Even if the risky investment becomes completely worthless (a rare possibility), the investor is assured of getting back the principal invested, out of the maturity moneys received on the government security.

- Option Based Portfolio Insurance (OPBI)

As with CPPI, the capital protection is based on investment in a debt security. The scheme can use the balance amount to buy options on equities.

As already explained in Chapter 4, the buyer of an option bears the option premium expense, but does not have to bear any loss arising out of an unfavourable movement in the market. Thus, the equity exposure does not bear any losses, beyond the option premium, which is an expense that is known when the option is bought.

Complex option trading strategies can also be used to hedge the equity portfolio on a continuing basis.

Investors should understand the source of capital protection. At times, these are structured on the basis of investment in non-government securities. The credit risk involved in non-sovereign securities was discussed in Chapter 4. Schemes where capital protection is based on investment in government securities are preferable for investors who are looking for the safety.

### 10.3.2. Portfolio Management Schemes (PMS)

Mutual Funds offer standardised schemes to investors at large. An investor in a scheme is effectively buying into the scheme's portfolio. He does not get a customised portfolio. Mutual fund schemes operate under the strict regulation of SEBI.

PMS seek to offer a customised portfolio to every investor. These are offered in two formats – discretionary and non-discretionary.

- In a discretionary PMS, the fund manager individually and independently manages the funds of each client in accordance with the needs of the client.
- On the other hand, in a non-discretionary PMS, the portfolio manager manages the funds in accordance with the directions of the client.

Portfolio Managers offering PMS need to register with SEBI. They also need to execute an agreement, in writing, with each client, clearly defining the inter se relationship and setting out their mutual rights, liabilities and obligations relating to the management of funds or portfolio of securities. The agreement has to contain the details as specified in Schedule IV of the SEBI (Portfolio Managers) Regulations, 1993.

SEBI has prescribed a minimum investment (not just an investment commitment) of Rs 25lakh for each investor in a PMS. Many PMS providers insist on a much higher investment, going up to a few crores of rupees in many cases.

The fees chargeable by the PMS manager can be based on portfolio managed or the returns generated. The strict expense limits prescribed for mutual fund schemes are not applicable for PMS.

Although PMS are also regulated by SEBI, they do not operate under the strict norms that are applicable for mutual funds, as regards portfolio construction, costs, disclosure, transparency, governance etc. Therefore, the investor has a greater responsibility to ensure adequate safeguard of his interests.

### 10.3.3. Structured Products and Equity Linked Debentures

Chapter 4 featured a discussion on investment and risk management in the context of equity, debt and derivatives. These can be mixed in various forms to create new instruments that are called *structured products.*

For instance, an instrument that offers a return that is equivalent to 6% plus the difference (%) between the Brent Oil Price and the Nymex Oil Price, is a combination of a debt instrument and an oil derivative.

Many of these are international products, which are increasingly being offered in India to high net worth investors. The minimum investment requirement is also high. Since these offerings are not vetted by SEBI (and may not be required to be so vetted, if privately placed), the investor needs to be extra careful. Before investing, he needs to understand the risk-return framework underlying the instrument, and the capability of the issuer to fulfil commitments across all kinds of market situations.

- In the last few years, such products are also being issued by Indian Non-Banking Finance Companies, linked to Indian equity indices like the Nifty. A typical structure would be a 2-3 year zero coupon note, where the return is linked to a diversified equity index. These are otherwise called Equity Linked Debentures or Market Linked Debentures. The applicable SEBI requirements are as follows:
- The issuer should have a minimum net worth of Rs 100crore.
- Minimum investment limit for any investor is Rs 10lakh.
- The liberal SEBI regulations for issue and listing of debt securities are applicable only if the principal is guaranteed,
- The instrument needs to be credit-rated by any registered Credit Rating Agency. It has to bear a prefix ‘PP-MLD’ denoting Principal Protected Market Linked Debentures, followed by the standardized rating symbols for long/short term debt.
- The Offer Document should include a detailed scenario analysis/ valuation matrix showing value of the security under different market conditions such as rising, stable and falling market conditions.

- A risk factor is to be prominently displayed that such securities are subject to model risk, i.e., the securities are created on the basis of complex mathematical models involving multiple derivative exposures which may or may not be hedged and the actual behaviour of the securities selected for hedging may significantly differ from the returns predicted by the mathematical models.
- Similarly, a risk factor is to be prominently displayed stating that in case of Principal/ Capital Protected Market Linked Debentures, the principal amount is subject to the credit risk of the issuer where by the investor may or may not recover all or part of the funds in case of default by the issuer.
- The issuer has to ensure that the intermediary selling the instrument to retail investors is SEBI-regulated.
- The intermediary has to ensure that investor understands the risks involved, is capable of taking the risk posed by such securities and it shall satisfy itself that securities are suitable to the risk profile of the investor.
- The intermediary has to provide an Offer Document to the investor even if he does not ask for it.
- The intermediary has to provide assistance to the investor on obtaining valuation information and provide guidance on exit loads, exit options, liquidity support provided by the issuer or through the exchange etc.

### 10.3.4. Hedge Funds

As would be clear from the discussions so far, various investment options have their unique risk and return characteristics. Mutual fund schemes mobilise money from investors at large, and invest them in some of these investment options. The investment philosophy of mutual funds schemes and the nature of investments they make, determine their underlying risk.

Hedge funds are a high risk variant of mutual fund schemes. They mobilise their capital from high net-worth investors. The risk is built into the scheme through one or more of the following features:

- Leveraging

The role of derivatives in building leveraged positions was covered in Chapter 4. Another form of leveraging is loans.

Suppose a fund earns 8% on its investment portfolio. If the expense ratio is 1%, then the scheme would report a performance of 8% less 1% i.e. 7%.

Now, consider a situation where a scheme that has unit capital of Rs 40, has also borrowed Rs 60 at an interest rate of 5%. The return that the scheme has earned in excess of the interest cost on borrowed funds would go to those who have invested in the unit capital of the scheme. This helps the scheme boost its performance, as seen below:

| | Case 1 | Case 2 |
|---|---|---|
| Portfolio (Rs ) | 100 | 100 |
| Portfolio Return | 8% | 8% |
| Expense Ratio | 1% | 1% |
| Net Portfolio Return | 7% | 7% |
| Net Portfolio Return (Rs ) | 7 | 7 |
| Unit Capital (Rs ) | 100 | 40 |
| Loan (Rs ) | 0 | 60 |
| Interest on Loan at 5% | 0 | 3 |
| Scheme Return (Rs ) | 7 | 4 |
| Scheme Return (% of Unit Capital) | 7% | 10% |

Thus, borrowing 1.5 times the unit capital at 5% interest rate has helped the scheme improve its performance by 3 percentage points (which is 3 ÷ 7 X 100 i.e. 43% higher than 7%).

Through higher leveraging, it is possible to boost the scheme performance even more. The downside is that if the portfolio return is below the interest cost - a distinct possibility in bearish markets – interest payments will drain the unit capital. Therefore, leveraging is a high risk approach to investments.

As explained in the MFD Workbook, mutual funds in India operate under strict regulations on their borrowings. Therefore, we do not see this kind of structure among Indian mutual fund schemes. But, some intermediaries offer hedge funds on private placement basis, outside the mutual fund regulatory framework.

- Foreign Currency Risk

International hedge funds borrow from low interest rate countries like US and Japan, to invest in the developing economies. This introduces foreign currency risk in the scheme. The implications of such a risk were discussed in Chapter 1.

- Short-selling

When an investor has bought a security, he is said to have gone long on the security. The maximum loss the investor faces is the price at which he has bought the security. Short-selling is an approach where the investor sells the security, with the hope of buying it back

later at a lower price. If the security is sold at Rs 100 and bought back at Rs 80, the investor earns Rs 20 per share.

The risk in short-selling comes out of the possibility of the market going up after the security has been sold. In the above example, if the investor is forced to buy back the security at Rs120, he ends up losing Rs 20 per share. Higher the price at which the security is bought back, greater would be the loss. The potential loss is infinite. This makes short-selling, a risky proposition.

Hedge funds that are privately placed with high net worth investors are beyond the mutual fund regulatory framework. Their structure too adds to the risk element. Therefore, investors need to take extra precautions before they invest in hedge funds.

## Exercise

**Multiple Choice Questions**

1. Which of the following is / are growth assets?
   a. Equity
   b. Gold
   c. Real Estate
   d. All the above

2. Capital Protection Oriented Schemes are always _____.
   a. Open-ended
   b. Close-ended
   c. Interval funds
   d. Exchange-traded funds

3. Market-linked debentures suffer from model risk and credit risk.
   a. True
   b. False

4. Hedge funds are _____.
   a. Arbitrage funds
   b. Low-risk funds
   c. Moderate-risk funds
   d. High-risk funds

**Answers**

1 – d, 2 – b, 3 – a, 4-d

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# 11. Cases in Financial Planning

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Practical aspects of financial planning
- Calculating long term and short term capital gains tax

Financial Planning was discussed in detail in Chapters 11 and 12 of the MFD Workbook. The following cases will get you acquainted with the application of some of those concepts and approaches.The cases given in this chapter are only indicative, to make candidates comfortable with the format. The cases in the final examination may relate to any content in the Workbook. Some questions in the cases will require the candidate to be aware of practical aspects covered in the MFD Workbook too.

The cases replicate typical client interaction situations. Each case in the exam is followed by 4 questions. (Some of the illustrative cases in this Chapter provide 8 questions for each case).

In any client meeting, various data / information might be shared by the client. The adviser needs to take a call on what data / information is relevant for what kind of question.

Accordingly, candidates are advised to first read the Case details to understand the nature of data / information provided. Thereafter, they should review the questions. This will help them decide on the most optimal approach to answer the questions. There is no single optimal approach, though the answers will be the same, irrespective of the approach adopted by the candidate. In most cases, a single well-designed spread-sheet will help the candidate answer all the questions that follow.

## Case 1

The XY family has investments of Rs30lakh in debt and Rs20lakh in equity. They recently married, soon after they graduated together. They saved Rs15lakh last year after tax. With the attractive salary that both earn, they expect their annual savings to go up 20% every year. They plan to invest in the same debt-equity ratio. The financial planner expects a post-tax yield of 7% on debt and 15% on equity. The family would like to go off on a world tour in 4 years. They reckon the current cost of the tour to be USD50,000 (Rs50 = 1 USD). The rupee is expected to get weaker by 3% p.a., while holiday costs may appreciate 5% p.a. They also want to buy a house in 7 years. The current cost of their preferred house is Rs1crore, which is expected to go up 10% p.a. (Assume all savings are invested at the end of the year)

Q1 What is the weighted average yield expectation for the XY family on their portfolio?

a. 11% b. 10.2% c. 11.5% d. 10.5%

Q2 If the return expectations materialise, what would be the value of their current portfolio in 4 years?

a. Rs39lakh b. Rs35lakh c. Rs74lakh d. Rs82lakh

Q3 How much is the expected outlay in future on the world tour?

a. Rs34lakh b. Rs30lakh c. Rs28 lakh d. Rs37lakh

Q4 If new savings are completely used for the world tour and other luxuries, how equipped is the current investment portfolio for meeting the cost of the house in 7 years?

a. Completely inadequate b. Marginally inadequate c. Just about adequate d. Comfortably covered

Q5 How equipped is the investment portfolio created from existing and new savings, for meeting the cost of the house in 7 years?

a. Completely inadequate b. Marginally inadequate c. Just about adequate d. Comfortably covered

Q6 What would be the value of the portfolio created from new savings, at the end of 3 years, if these are invested in the same debt-equity ratio and the return expectations materialise?

a. Rs41.4lakh b. Rs71.6lakh c. Rs110lakh d. Rs75.2lakh

Q7 What should the FP recommend to the XY family regarding their asset allocation in the next few years?

a. Maintain b. Consider increasing debt component c. Consider increasing the equity component d. can't say

Q8 What would a prudent FP suggest to the XY family on their future goals?

a. Go on world tour immediately because costs will go up in future b. Consider prioritising the house purchase c. Avoid buying the house because it is an illiquid asset d. Spend more because it will boost the economy

**Answers** (based on spread sheet shown in next page)

1 – b, 2 – c, 3 – a, 4-a, 5-d, 6-b, 7-c, 8-b

| **Year->** | | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
|---|---|---|---|---|---|---|---|---|---|
| **Existing Investments** | | | | | | | | | |
| Debt | | 30 | 32.10 | 34.35 | 36.75 | 39.32 | 42.08 | 45.02 | 48.17 |
| Yield | | | 7% | | | | | | |
| Equity | | 20 | 23.00 | 26.45 | 30.42 | 34.98 | 40.23 | 46.26 | 53.20 |
| Yield | | | 15% | | | | | | |
| *Total* | | *50.00* | *55.10* | *60.80* | *67.17* | *74.30* | *82.30* | *91.28* | *101.37* |
| **New Investments** | | | | | | | | | |
| | | Last yr | | | | | | | |
| Savings | | 15.00 | 18.00 | 21.60 | 25.92 | 31.10 | 37.32 | 44.79 | 53.75 |
| Savings growth | | | 20% | | | | | | |
| New Debt | OB | | 0.00 | 10.80 | 24.52 | 41.78 | 63.37 | 90.20 | 123.39 |
| | Interest | | 0.00 | 0.76 | 1.72 | 2.92 | 4.44 | 6.31 | 8.64 |
| | Additions | | 10.80 | 12.96 | 15.55 | 18.66 | 22.39 | 26.87 | 32.25 |
| | CB | | 10.80 | 24.52 | 41.78 | 63.37 | 90.20 | 123.39 | 164.28 |
| New Equity | OB | | 0.00 | 7.20 | 16.92 | 29.83 | 46.74 | 68.68 | 96.90 |
| | Interest | | 0.00 | 1.08 | 2.54 | 4.47 | 7.01 | 10.30 | 14.54 |
| | Additions | | 7.20 | 8.64 | 10.37 | 12.44 | 14.93 | 17.92 | 21.50 |
| | CB | | 7.20 | 16.92 | 29.83 | 46.74 | 68.68 | 96.90 | 132.94 |
| *Total* | | | *18.00* | *41.44* | *71.61* | *110.11* | *158.88* | *220.29* | *297.21* |
| *Existing + New* | | | | | | | | | *398.59* |
| **World Tour** | | | | | | | | | |
| USD | | 0.50 | 0.53 | 0.55 | 0.58 | 0.61 | 0.64 | 0.67 | 0.70 |
| Change | | | 5% | | | | | | |
| Ex Rate | | 50.00 | 51.50 | 53.05 | 54.64 | 56.28 | 57.96 | 59.70 | 61.49 |
| Change | | | 3% | | | | | | |
| Exp in INR | | 0 | | | 32 | 34 | | | |
| House | | 100.00 | 110.00 | 121.00 | 133.10 | 146.41 | 161.05 | 177.16 | 194.87 |
| Change | | | 10% | | | | | | |

## Case 2

An investor bought units of a scheme as follows: Feb 5, 2015 500 units @ Rs12; Aug 7, 2015 600 units @ Rs13. He sold 600 units at Rs14 on March 2, 2016. Cost Inflation Index numbers are 2013-14939; 2014-151024; 2015-161081; 2016-17 1125. Assume the investor is in 20% tax bracket. Ignore STT, Surcharge & Education Cess.

Q1 How much long term capital gain did the investor book on the sale, if the units related to equity scheme?

a. Rs1,000 b. Rs100 c. Rs200 d. Rs500

Q2 How much short term capital gain did the investor book on the sale, if the units related to equity scheme?

a. Rs1,000 b. Rs100 c. Rs200 d. Rs500

Q3 How much long term capital gain did the investor book on the sale, if the units related to debt scheme?

a. Nil b. Rs100 c. Rs200 d. Rs500

Q4 How much long term capital gain tax will the investor have to pay, if the units related to equity scheme?

a. Rs150 b. Rs100 c. Rs200 d. Nil

Q5 How much long term capital gain tax will the investor have to pay, if the units related to debt scheme?

a. Rs150 b. Rs100 c. Rs50 d. Nil

Q6 How much short term capital gain tax will the investor have to pay, if the units related to equity scheme?

a. Rs15 b. Rs10 c. Rs20 d. Nil

Q7 How much short term capital gain tax will the investor have to pay, if the units related to debt scheme?

b. Rs15 b. Rs10 c. Rs220 d. Nil

Q8 Financial Planner should advise investor to sell the equity units only after 1 month so that tax is minimised.

a. True b. False

**Answers:**

1-a (calculated on FIFO basis only on first purchase), 2-b (calculated on remaining 100 units which are part of second purchase), 3-a, 4-d, 5-d, 6-a, 7-c, 8-b (market can move adversely during the month)

**Working Space**

## Case 3

| Fund name | SSS Income Fund | ABC Income fund | |
|---|---|---|---|
| AUM (Rs cr) | 1500 | 1000 | |
| | | | |
| **Scheme performance** | | | |
| Last 3 months | 1.30% | 1.20% | Absolute |
| Last 6 months | 2.25% | 2.50% | Absolute |
| Last 1 year | 4.15% | 5.00% | Annualised |
| Last 3 years | 4.30% | 5.50% | Annualised |
| Last 5 years | 4.10% | 3.50% | Annualised |
| | | | |
| Expense ratio | 0.57% | 1.50% | |
| | | | |
| Average maturity | 2.5 years | 2.75 years | |
| Modified duration | 2.2 years | 2.4 years | |
| | | | |
| **Rating profile** | | | |
| Sovereign | 25% | 15% | |
| AAA | 50% | 40% | |
| AA | 20% | 30% | |
| Unrated | 5% | 10% | |

Q1 Which fund has a higher credit risk?

a. ABC Income Fund b. SSS Income Fund c. Both carry same risk d. Can't say with available information

Q2 Which fund has a lower market risk?

a. ABC Income Fund b. SSS Income Fund c. Both carry same risk d. Can't say with available information

Q3Which fund would you recommend to a safe and conservative investor?

a. ABC Income Fund b. SSS Income Fund c. Both carry same risk d. Can't say with available information

Q4If the expectation is that the economy will be rather stable, and there is less possibility of interest rates rising, which scheme would you recommend to a risk preferring investor who is investing in debt for asset allocation purposes?

a. ABC Income Fund b. SSS Income Fund c. Both carry same risk d. Can't say with available information

**Answers:**

1-a, 2-b, 3-b, 4-a

**Working Space**

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## Case 4

An investor invested Rs100,000 in an equity fund, Rs300,000 in an income fund, Rs500,000 in a gilt fund, Rs250,000 in a sector fund and Rs50,000 in a liquid fund. The schemes earned returns of6%, 7.5%, 7%, -10% and 5% respectively during the year.

Q1 What was the weighted average annual return earned on the portfolio?

b. 3.1% b. 3.4% c. 2.5% d. 4%

Q2What was the debt-equity mix in the investor's portfolio?

a. 2:1 b. 8:1 c. 1:11 d. 17:7

Q3 How would you change the portfolio based on the available information?

a. Reduce exposure to liquid fund
b. Reduce exposure to sector fund
c. Both the above
d. Can't say

Q4 Which of the above is likely to yield the highest return in the following year?

a. Equity Fund b. Sector Fund c. Gilt Fund d. Can't say

**Answers:**

1-b, 2-d, 3-d, 4-d

**Working Space**

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# 12. Ethics and Investor Protection

**LEARNING OBJECTIVES:**

After studying this chapter, you should know about:

- Code of ethics prescribed by AMFI
- Various forms of mis-selling of mutual fund products
- Safeguards provided in the mutual fund structure against frauds and scams
- Regulatory steps for protecting investors against frauds and scams

Ethics is important for any relationship to survive and business to flourish. It is for this reason that SEBI and AMFI have taken various steps to ensure ethical conduct in the mutual fund industry.

## 12.1. Code of Conduct

The MFD Workbook discussed this. Given the importance, the same is re-iterated in this section.

### 12.1.1. AMFI Code of Ethics (ACE)

The AMFI Code of Ethics sets out the standards of good practices to be followed by the Asset Management Companies in their operations and in their dealings with investors, intermediaries and the public.

SEBI (Mutual Funds) Regulation, 1996 requires all Asset Management Companies and Trustees to abide by the Code of Conduct as specified in the Fifth Schedule to the Regulation. The AMFI Code has been drawn up to supplement that schedule, to encourage standards higher than those prescribed by the Regulations for the benefit of investors in the mutual fund industry. Annexure 3.1 of the MFD Workbook has the details.

While the SEBI Code of Conduct lays down broad principles, the AMFI code of ethics (ACE) sets more explicit standards for AMCs and Trustees.

### 12.1.2. AMFI's Code of Conduct for Intermediaries of Mutual Funds

AMFI has also framed a set of guidelines and code of conduct for intermediaries, consisting of individual agents, brokers, distribution houses and banks engaged in selling of mutual fund products. The Code of Conduct is detailed in Annexure 3.2 of the MFD Workbook. SEBI has made it mandatory for intermediaries to follow the Code of Conduct.

In the event of breach of the Code of Conduct by an intermediary, the following sequence of steps is provided for:

- Write to the intermediary (enclosing copies of the complaint and other documentary evidence) and ask for an explanation within 3 weeks.
- In case explanation is not received within 3 weeks, or if the explanation is not satisfactory, AMFI will issue a warning letter indicating that any subsequent violation will result in cancellation of AMFI registration.
- If there is a proved second violation by the intermediary, the registration will be cancelled, and intimation sent to all AMCs. The intermediary has a right of appeal to AMFI.

### 12.1.3. Guidelines for Circulation of Unauthenticated News

SEBI has issued guidelines to all market intermediaries relating to circulation of unauthenticated news through various modes of communication. Following are the guidelines stipulated by SEBI:

- Proper internal code of conduct and controls should be put in place by market intermediaries registered with SEBI. Employees/ temporary staff/ voluntary workers etc. employed/ working in the offices of market intermediaries should not encourage or circulate rumours or unverified information obtained from client, industry, any trade or any other sources without verification.
- Access to Blogs/ Chat forums/ Messenger sites etc. should either be restricted under supervision or access should not be allowed.
- Logs for any usage of such Blogs/ Chat forums/ Messenger sites (called by any nomenclature) have to be treated as records and the same should be maintained as specified by the respective Regulations which govern the concerned intermediary.
- Employees should be directed that any market related news received by them either in their official mail/personal mail/blog or in any other manner, should be forwarded only after the same has been seen and approved by the concerned Intermediary's Compliance Officer. If an employee fails to do so, he/she shall be deemed to have violated the various provisions contained in SEBI Act/Rules/Regulations etc. and shall be liable for action. The Compliance Officer shall also be held liable for breach of duty in this regard.

## 12.2. Mis-selling

Mis-selling is not defined in the Act. However, every instance where an investor is told something that is not true, with the intention of influencing him to buy the product would qualify as mis-selling. Similarly, convincing an investor to buy a product that is not appropriate for the person’s risk profile is a case of mis-selling.

The financial planning approach is the best safeguard for the investor. When products are sold based on risk profile of the investor and his asset allocation, he avoids buying products that are not suitable for him.

SEBI has come out with various steps to control mis-selling. For instance, it was found that investors were getting influenced to churn their investment portfolio frequently. Investors would often exit their investments in existing schemes, to invest in NFOs. While the investor would bear the load, intermediaries earned attractive commission, paid out of these loads. SEBI therefore put an end to the practice of charging an entry load. This limited the selling commissions, and churn in investor's portfolios.

SEBI has also prescribed detailed guidelines on information disclosure. For instance, a scheme cannot demonstrate a 2% return in 1 week, and on that basis claim that the annualised return is over 100%. How return is to be calculated for different kinds of schemes and different time periods have been specified. This was covered in the MFD Workbook.

Investment policy, asset allocation, returns, risk etc. are explained in the Offer Documents of schemes. Investors should read the same before investing.

By separating the Scheme Information Document (SID) from the Statement of Additional Information (SAI), SEBI has made it easier for investors to access and understand the salient features of each scheme. A well-informed investor is in a better position to protect himself.

Cut-off timings have been prescribed for determining the NAV that would be applicable on investments and redemptions during the day. This protects lay-investors from any mischief created by unethical investors, seeking to break the system.

At times, investors get swayed by rebating viz. commission passed back to the investors. They invest depending on the commission passed on, rather than the quality of the investment and its suitability. Therefore, intermediaries were told to stop the practice of rebating.

When schemes were mis-sold as a short-term tool to benefit from a planned dividend distribution, SEBI clamped down on the practice. The Central Government too changed the tax laws. They specified a minimum investment holding period for investors to set-off their capital loss against other capital gains. Dividend stripping provisions were discussed in Chapter 7.

As discussed in the next section, sound legal structure with checks and balances is an effective safeguard for investor protection.

Intermediaries need to ensure that client's interest and suitability to their financial needs is paramount, and that extra commission or incentive earned should never form the basis for recommending a scheme to the client.

## 12.3. Safeguards in Mutual Fund Structure

Besides the measures mentioned earlier to prevent mis-selling and protect investors, the mutual fund structure, with its inbuilt checks and balances are a source of immense comfort for investors. The legal structure was discussed in detail in the MFD Workbook. The following safeguards may be noted:

- While the day to day activities are handled by the AMC, the trustees are responsible for exercising control over the AMC. This is an additional layer of control, beyond the overall regulation by SEBI.
- The Custodian is an entity independent of the AMC. It handles the receipt and delivery of the scheme's investments and keeps a tab on corporate actions such as bonus and dividend.
- The investments are held in the name of the individual schemes. This ensures that investors in the scheme earn the returns that are due to them.
- Transfers of investments between schemes need to be at market value. This prevents any mischief of transferring profits or losses from one scheme to another.

## 12.4. Regulatory Steps for Protecting Investors against Fraud

SEBI and AMFI have taken several steps to protect investors against fraud. The following are some measures taken to address the risks in investor service processes:

### 12.4.1. Third Party Payments

Mutual Funds have been asked to ensure that payment for investments is made out of the bank account of one of the persons who is mentioned as an applicant for those units. Third party payments are accepted only in exceptional cases. For instance, payment by parents/ grand-parents/ related Persons on behalf of a minor in consideration of natural love and affection or as gift for a value not exceeding Rs 50,000/- for each regular purchase or per SIP instalment. 'Related Person' means any person investing on behalf of a minor in consideration of natural love and affection or as a gift. In such cases persons who make payment should be KYC Compliant and sign Third Party Declaration Form. Similarly, employer making payments on behalf of employee through payroll deductions, and custodian on behalf of FIIs are permitted third-party payments. AMCs are required to put checks and balances in place to verify such transactions. This ensures that cheques do not get misappropriated by anyone in the system.

### 12.4.2. Bank Mandates

Investors, who are individuals, can register upto 5 bank accounts with the AMC, and also indicate one of them as a default bank account. Dividend and redemption payments are directly credited to the investor's default bank account. This is not only faster and convenient for the investor, but also eliminates the risk of stolen cheques. Where direct credit is not possible, dividend and redemption cheques have to mention the default bank account. This prevents fraudulent encashment of cheques.

The investor can easily change the default bank account to one of the other registered bank accounts. If a new bank account is to be registered, the investor has to provide complete details, including bank name, branch name, MICR (where applicable), IFSC code (where applicable), account number and type of account. The investor has to also submit a cancelled blank cheque to enable verification of the bank details.

### 12.4.3. Third Party Redemptions

Redemption requests need to be signed as per the account operating instructions registered with the AMC. This ensures that redemption requests are not fraudulently made to the AMC or RTA.

Redemption moneys are paid through direct credit to the registered bank account, or by cheques that mention the default bank account number.

### 12.4.4. KYC

The KYC requirements were discussed in the MFD Workbook. This not only prevents money laundering, but also ensures that investors are not cheated through any fraudulent investment followed by redemption.

The SEBI initiative for Centralised KYC Registration Agencies has made the KYC process convenient for financial market investors, while ensuring proper recording of investor information and in-person verification of investors.

### 12.4.5. Change of Address

This is done through a KYC Update Form that has to be submitted to CVL along with requisite documents. CVL in turn informs the RTA. This addresses the risk of a fraudster siphoning the money of the investor by changing the address records for the folio.

### 12.4.6. Power of Attorney

In case transactions are to be done under a power of attorney, then either the original power of attorney or a notarised copy has to be filed with the AMC. It has to contain the signature of both the investor and the attorney.

### 12.4.7. KYD

The regulators have also brought in Know Your Distributor (KYD) requirements. Thus, all the details of the distributor, including finger print is available at a central place.
The unique features of mutual fund structure and processes have ensured the highest standards of protection for mutual fund investors.

### 12.4.8. Due Diligence of Distributors

AMCs are expected to perform due diligence of distributors who fulfil one or more of the following criteria:

- Multiple point presence (More than 20 locations)
- AUM raised over Rs 100Crore across industry in the non-institutional category but including high networth individuals (HNIs)
- Commission received of over Rs 1 crore p.a. across industry
- Commission received of over Rs 50 Lakh from a single Mutual Fund

At the time of empanelling distributors and during the period i.e. review process, Mutual Funds/AMCs have to undertake a due diligence process to satisfy 'fit and proper' criteria that incorporate, amongst others, the following factors:

- Business model, experience and proficiency in the business.
- Record of regulatory / statutory levies, fines and penalties, legal suits, customer compensations made; causes for these and resultant corrective actions taken.
- Review of associates and subsidiaries on above factors.
- Organizational controls to ensure that the following processes are delinked from sales and relationship management processes and personnel:

i) Customer risk / investment objective evaluation.
ii) MF scheme evaluation and defining its appropriateness to various customer risk categories
iii) In this respect, customer relationship and transactions are to be categorized as:

- Advisory – where a distributor represents to offer advice while distributing the product, it is subject to the principle of 'appropriateness' of products to that customer category. Appropriateness is defined as selling only that product categorization that is identified as best suited for investors within a defined upper ceiling of risk appetite. No exception can be made.
- Execution Only – in case of transactions that are not booked as 'advisory', it still requires:

  i) If the distributor has information to believe that the transaction is not appropriate for the customer, a written communication is to be made to the investor regarding the unsuitability of the product. The communication has to be duly acknowledged and accepted by investor.

  ii) A customer confirmation to the effect that the transaction is 'execution only' notwithstanding the advice of in-appropriateness from that distributor is to be obtained prior to the execution of the transaction.

  iii) On all such 'execution only' transactions, the customer is not required to pay the distributor anything other than a standard flat transaction charge.

- No third categorization of customer relationship / transaction is permitted.

- While selling Mutual Fund products of the distributors' group/affiliate/associates, the distributor has to make disclosure to the

customer regarding the conflict of interest arising from the distributor selling such products.

### 12.4.9. Compliance and Risk Management Functions of Distributors

The following defined management processes are to be reviewed:

- The criteria to be used in review of products and the periodicity of such review.
- The factors to be included in determining the risk appetite of the customer and the investment categorization and periodicity of such review.
- Review of transactions, exceptions identification, escalation and resolution process by internal audit.
- Recruitment, training, certification and performance review of all personnel engaged in this business.
- Customer on boarding and relationship management process, servicing standards, enquiry / grievance handling mechanism.
- Internal / external audit processes, their comments / observations as it relates to MF distribution business.
- Findings of ongoing review from sample survey of investors

### 12.4.10. Employee Unique Identification Number (EUIN)

SEBI mandated AMFI to create a unique identity number of the employee/ relationship manager/ sales person of the Corporate distributors interacting with the investor for the sale of mutual fund products. This is in addition to the AMFI Registration Number (ARN) of the distributor. CAMS generates the EUIN and maintains the database.

ARN holder who has a proprietary structure and does not have any employees engaged in selling and marketing mutual fund products needs to confirm the same to AMFI. Such ARN holders have to intimate AMFI-unit of CAMS in case they employ any sales person so that EUIN could be allotted to them.

The EUIN of the concerned sales person has to be entered in the application form in addition to entering the ARN code / Sub-broker code. This is applicable to Purchases, Switches, Registrations of SIP / STP / Trigger STP / Dividend Sweep Plan.

Instalments under SIP/ STP / SWP / STP Triggers, Dividend Reinvestments, Bonus Units, Redemption, SWP Registration, Zero Balance Folio creation and instalments under Dividend Transfer Plans are exempted from the requirement of entering EUIN.

When an employee changes jobs from one ARN holder to another, the same is tracked in the CAMS database. This helps probing of mis-selling cases even if the employee has changed jobs.

Thus, SEBI has taken various measures to ensure that mutual funds are a secure form of investment for investors.

## Exercise

**Multiple Choice Questions**

1. AMFI Code of Ethics is meant for
   a. AMCs
   b. Distributors
   c. Investors in mutual funds
   d. All the above

2. Rebating is the practice of
   a. Selling duplicate unit certificates
   b. Selling units at a discount to NAV
   c. Selling units through the net
   d. Passing on distributor commission to investors

3. Change of Address request is required to be submitted to
   a. AMC
   b. Distributor
   c. RTA
   d. CVL

4. Individuals can register upto___ bank accounts with the AMC.
   a. 2
   b. 3
   c. 4
   d. 5

**Answers**

1 – a, 2 – d, 3 – d, 4-d

## List of Abbreviations

| | |
|---|---|
| A/A | Articles of Association |
| ACE | AMFI Code of Ethics |
| AMC | Asset Management Company |
| AMFI | Association of Mutual Funds in India |
| AML | Anti-Money Laundering |
| ARN | AMFI Registration Number |
| ASBA | Application Supported by Blocked Amount |
| CAGR | Compounded Annual Growth Rate |
| CDSC | Contingent Deferred Sales Charge |
| CFT | Combating Financing of Terrorism |
| CVL | CDSL Ventures Ltd |
| DD | Demand Draft |
| DDT | Dividend Distribution Tax (Additional Tax on Income Distribution) |
| DP | Depository Participant |
| ECS | Electronic Clearing Service |
| EUIN | Employee Unique Identity Number |
| F&O | Futures & Options |
| FCNR | Foreign Currency Non-Resident account |
| FEMA | Foreign Exchange Management Act, 1999 |
| FII | Foreign Institutional Investor |
| FIRC | Foreign Inward Remittance Certificate |
| FMP | Fixed Maturity Plan |
| FPI | Foreign Portfolio Investor |
| HUF | Hindu Undivided Family |
| ISC | Investor Service Centre |
| KIM | Key Information Memorandum |
| KYC | Know Your Customer |
| M-Banking | Mobile Banking |
| MF | Mutual Fund |
| Micro-SIP | SIP with annual aggregate investment less than Rs50,000 |
| NAV | Net Asset Value |
| NBFC | Non-Banking Finance Company |
| NEFT | National Electronic Funds Transfer |
| NFO | New Fund Offer |
| NOC | No Objection Certificate |
| NPA | Non-Performing Asset |
| NRE | Non-Resident External account |
| NRI | Non-Resident Indian |
| NRO | Non-Resident Ordinary account |
| PAN | Permanent Account Number |
| PDC | Post-Dated Cheques |

| | |
|---|---|
| PFM | Pension Fund Manager |
| PFRDA | Pension Fund Regulatory & Development Authority |
| PIO | Person of Indian Origin |
| PMLA | Prevention of Money Laundering Act |
| PoA | Power of Attorney/ Points of Acceptance, depending on context |
| POP | Points of Presence |
| RBI | Reserve Bank of India |
| RTA | Registrars & Transfer Agents |
| RTGS | Real Time Gross Settlement |
| SAI | Statement of Additional Information |
| SEBI | Securities & Exchange Board of India |
| SID | Scheme Information Document |
| SIP | Systematic Investment Plan |
| SRO | Self Regulatory Organisation |
| STP | Systematic Transfer Plan |
| STT | Securities Transaction Tax |
| SWP | Systematic Withdrawal Plan |
| SWIFT | Society for Worldwide Interbank Financial Telecommunication |
| VCF | Venture Capital Fund |
| VCU | Venture Capital Undertaking |

**Reading List**


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**Browsing List**

- AMFI (www.amfiindia.com)
- BSE (www.bseindia.com)
- Credence Analytics (www.credenceanalytics.com)
- CRISIL (www.crisil.com)
- Lipper (www.lipperweb.com)
- Morning Star (www.morningstar.com)
- NSE (www.nseindia.com)
- RBI (www.rbi.org.in)
- SEBI (www.sebi.gov.in) - Mutual Funds Section
- Value Research (www.valueresearchonline.com)

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